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LOYOLA UNIVERSITY CHICAGO

THE ROLE OF SOCIAL SUPPORT IN
THE TRANSITION OF ADOLESCENT
MALES TO RESIDENTIAL CARE

A DISSERTATION SUBMITTED TO
THE FACULTY OF THE GRADUATE SCHOOL
IN CANDIDACY FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

DEPARTMENT OF COUNSELING
AND EDUCATIONAL PSYCHOLOGY

BY

STEPHEN J. DOHNER

CHICAGO, ILLINOIS

MAY 1996

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VITA

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CHAPTER I

INTRODUCTION

By its nature adolescence is a time of transition. It stands between childhood and adulthood, encompassing a period of developmental tasks and challenges that affect both adolescents and those who deal with them. As such, it has become an area of increasing interest to researchers and clinicians. An important way of understanding this period is by observing how adolescent transitions do not occur in a vacuum but within the context of social relationships. For adolescents, especially, the normative relationships that help define their experience are those with family and peers. A significant way of gaining insight into the influence of these relationships and the meaning assigned to them is through measuring the social support each group provides.

Social support research has an extensive history in the professional literature. Over the past thirty years, particularly, this literature has expanded exponentially to embrace various subsets of normal and disturbed populations in a variety of hospitalized, work-related, academic, and social settings. The bulk of these studies have been concerned with adult populations; a significant number have investigated young adults, adolescents, and children. Beginning with epidemiological studies of a generation ago, a robust finding in the literature has been of the relationship between social support and the ability to withstand stressful events and adjustments.

Only within the last decade, however, has criticism of social support studies and the construct itself begun to influence the direction of psychological research. The desire for more specific, measurable, and comparable dimensions of the social support construct has spawned instruments and protocols that attempt to delineate dimensions of support

and their relative effects on stress. This has resulted in a clearer understanding of the titrating effects and limitations of various dimensions of support.

In addition, research has expanded beyond studies of traditional adult and hospitalized adolescent subjects to embrace less traditional subjects and stressful events. This has resulted in a depth of understanding of the limits of the effects of social support on various populations and in different settings. The robustness of the buffering effect of social support, for instance, can be tested by examining those whose social support resources are limited or deficient when compared to the general population. The question of the limits of social support are just beginning to be understood in depth.

This research project has been designed to explore dimensions of social support in a vulnerable population, adolescents entering residential care. These subjects often come from broken homes, a background of poverty, and limited educational opportunity. The supportive people in their lives and their modes of providing support stand in stark contrast to the resources of more affluent, educated adolescents in intact families. Yet, as social support research suggests, often it is the perception of support that has the greatest influence in limiting the effects of stress. This project examines the influence that the perception of social support provides for a vulnerable, nontraditional, adolescent population. The issues examined are intended to add to the larger effort among researchers to specify the construct and to test for important theoretical and clinical issues in the context of social support theory.

Overview of Adolescents in Transition

A popular view of adolescence is as a stage of life distinct from both childhood and adulthood encompassing the second decade of life. Its onset is defined by the individual's entry into puberty and encompasses a period of growth during which the individual changes from child to mature adult in both a physiological and social sense.

Physiologically, it involves a complex series of changes in physical development and, particularly, in sexual maturation and functioning. Socially, it is viewed as a transition from dependency on parents and other adults to increasing independence in living and decision-making. From a social perspective, many would argue that being an adolescent today is a different experience than it was several decades ago, and that within the contemporary milieu there is a wide divergence in the way that adolescence is experienced, based on social and cultural factors as diverse as economic status, education opportunity, race, and family structure.

When considered from the perspective of the behavioral scientist, however, adolescence is a more subtle and complex stage of life. G. Stanley Hall (1916) is the first modern theorist to postulate a psychological theory of adolescence. Hall views it as a unique developmental stage marked by turbulence as well as transition, making it distinct among human developmental transitions. Adolescence from the perspective of the behavioral sciences involves changes in the biological, intellectual, emotional, and social spheres that occur over a significant time period. It is not a unitary phenomenon but one subject to variations of intensity, duration, stressors, and outcomes from adolescent to adolescent, variations influenced by forces within the developing adolescent and from the environment in which these transitions occur. There are important differences between the pathways followed by females and males through adolescence. Since this study involves male adolescents exclusively, the transitions of adolescence explicated here will be limited to a description of the male passage.

The period of adolescence is considered by some theorists to be sufficiently complex to warrant division into discrete substages, although there is a diversity of theoretical opinion as to the exact nature and even the number of substages. Blos (1962, 1979), for instance, divides adolescence into five stages--preadolescence, early adolescence, adolescence proper, late adolescence, and post-adolescence--that encompass

a second process of individuation, distinct from the individuation a child achieves through the attainment of object constancy around the end of the third year and which, when successfully completed at the end of adolescence, results in the attainment of an adult identity. In a more recent formulation, Elliott and Feldman (1990) divide the period of adolescence into early, middle and late substages. For them early adolescence encompasses the physical and social changes that occur with puberty and lasts roughly from ages 10 to 14. Middle adolescence, lasting from ages 15 to 17, focuses on the increasing independence of the individual; for many in Western cultures, this marks the final substage of adolescence as the individual moves substantially into the adult world of work and independence from the family of origin. Late adolescence, when it occurs, can last from age 18 through much of the following decade for those who have delayed entry into adulthood due to such causative factors as continued educational pursuits. Others theorize adolescence as consisting of at least two distinct stages (Newman & Newman, 1984): the first of these lasts from puberty to about age 18, and is characterized by physiological changes, cognitive development, and the increasing importance of the peer culture; the second begins at about age 18 and lasts for several years as the late adolescent seeks autonomy from the family and the achievement of a sense of personal identity. Erikson (1968), in a classic formulation, views adolescence as a single developmental stage lasting from about age 11 to age 21 that is characterized by the conflict over identity versus role diffusion. Some theorists do not see adolescence as a discrete stage at all, but locate it within a continuum of growth from birth through adult life that has as its salient feature behavioral contingencies and reinforcement (Masterson, 1968; Offer & Offer, 1975).

Adolescent transitions are further distinguishable not only by their timing and the order in which they occur, but by the type of transition itself. From a psychological perspective, these transitions are of importance for the influence they exert on the

development of an adult identity. These include physiological, psychosexual, cognitive, emotional, behavioral, and psychosocial changes.

Physiological Transitions

Physiological changes related to puberty are probably the changes most commonly associated with adolescence. These changes include the growth spurt and redistribution of body weight, the maturation of the reproductive system, and the appearance of secondary sexual characteristics. Although changes associated with puberty typically peak around age 12 for females and age 13 for males, variability in the rate of development is common; for males, physical maturation may take anywhere from two to five years (Faust, 1977; Tanner, 1978).

Individual differences in the rate of maturation during adolescence result in great physical diversity within the peer group, especially during early adolescence. These differences in the rate and timing of maturation have psychological consequences. Those males who mature later than their peers often experience increased stress and the development of a negative self-image (Clausen, 1975). Physical development may also influence psychological and social development during adolescence in several ways. For instance, during this period physical changes may alter the ability of an individual to perform certain tasks. In addition, physiological changes may alter the ways in which an individual is perceived by others. Finally, these changes may alter the way in which an adolescent perceives himself. Depending on the type of change and the meaning assigned to it, either a beneficial or deleterious effect may ensue for the adolescent.

Speaking from a psychoanalytic perspective, Blos (1962) defines adolescence in part as the psychological adjustment to the physiological changes of puberty. He perceives adolescents as strongly influenced by their own physical transformation and

contends that bodily changes influence the adolescent's interpersonal relations, interests, and emotional experiences.

Bloom (1990) suggests that several developmental tasks related to physiological changes hold psychological importance for the adolescent. Some developmental phenomena, such as the development of adult bone structure or the timing of puberty, are biologically determined. Others involve proactive measures adolescents can take that will affect their developing physiology, such as physical exercise that enhances stamina or muscle tone, nutritional habits, sleep patterns, or the augmentation of naturally-occurring physical development with drugs. There are also developmental tasks associated with the changing meaning adolescents assign to such physical constants as the color of their skin, the lifestyle choices they make in response to their biological gender, the significance they attach to their perception of their body image, and the consequences they perceive to exist because of early or late maturation.

Psychosexual Transition

The Freudian tradition considers adolescence as the final period of psychosexual development. Sigmund Freud (1905) characterizes it as a turbulent period during which the adolescent must achieve emotional separation from the parents. It necessitates the management of strong libidinal drives that are stimulated by the onset of puberty and initially misdirected to parents; the task of this period includes redirecting these misplaced drives to appropriate libidinal objects.

Anna Freud (1936) attributes the extremes of adolescence to unacceptable unconscious libidinal drives; these are manifested in the erratic behavior typical of this age group. She postulates that adolescent turmoil is attributable to the unconscious struggle within the individual between unacceptable drives and impulses and socially acceptable outlets. This results in confusion for the adolescent that is evident in outbursts of

emotional extremes and erratic and turbulent behavior. She describes the defense mechanisms of asceticism and intellectualization as being of particular importance during this period. Asceticism acts to defend against instinctual desires for comfort in order to mask the drive for satisfaction of unacceptable sexual desires. Intellectualization is the attempt on the part of the adolescent to resist the instinctual drive to feel and enjoy objects. By turning to abstract and theoretical interests, the adolescent is able to reject concrete involvement with others. Turning the guilt over these drives inward results in a reduction of anxiety.

Anna Freud (1936) interprets adolescent turmoil as an adaptive process. She theorizes that, in spite of the reduction in outward turmoil, a turning inward of these instinctual drives is evidence of a high degree of defensiveness that typifies arrested energy. She suggests that those adolescents who are emotionally stronger and are better able to handle the raw drive of these instinctual impulses without a high degree of defensiveness, even if they appear to be disturbed because of their erratic behavior, may in fact be better able to work through adolescent conflict and will pass into maturity more readily than those who are more highly defended and yet present as controlled and more emotionally restrained.

Blos (1962, 1970) builds on the Freudian paradigm of psychosexual stage development from an object relations perspective. Blos also equates normal development with the successful resolution of the five psychosexual stages. He sees a parallel between adolescent turmoil and the early childhood process of separation and individuation. For the young child, achieving appropriate individuation from the mother is necessary in order to develop relationships with others and is triggered by the experience of the young child realizing the distinction between self and non-self. At adolescence, Blos posits, a more complex individuation experience occurs which, when successfully resolved, leads to a sense of self identity and adult independence. The individuation tasks of the young child

and the adolescent, as Blos views it, are not analogous. In order for the young child to resolve the separation anxiety associated with absence from the mother, the child must learn to internalize the mother object. By the teenage years, by way of contrast, the normal adolescent has already internalized the mother object. Anxiety during adolescence derives from the separation from the internalized object that seems to be a part of him. The fragmentation, rebelliousness, and self-consciousness of adolescence are all reflections of the internal turmoil of deciding what is the self and what is not. This process, as Blos describes it, includes the slow severing of the developing child's emotional ties to the family of origin and the often tentative efforts to enter the adult world. For Blos, the instability and indecision of adolescence is played out between the desires for withdrawal and independence. Of particular importance for this process are the adolescent's peer relationships. The peer group is used by the individual in the process of separation from the primary love objects of the family. Peers gradually replace the family as infantile libidinal and aggressive dependencies give way to extrafamilial object involvement. This identification with the broader world of age-mates and others provides personalities, values, ideas, and ambitions not tied to the family that help shape the formation of a mature ego-ideal (Blos, 1979).

Behavioral Transition

A behavioral view of adolescent transition postulates that change occurs at any stage of life because of reinforcement contingencies (Masterson, 1968; Offer & Offer, 1975). Bandura (1964) holds that throughout childhood, behavior is a function of parental and societal reinforcement. Children learn through the immediate response to their behavior by parents, and by the values and contingencies that the culture encourages through its structures, policies, and rewards (Bandura & Walters, 1963). As social opportunities broaden to include more than members of the immediate family, feedback

becomes increasingly influential in shaping adolescent behavior; this is most noticeable within the peer group that, by the sheer amount of social contact and the immediacy of the pressures exerted, helps shape adolescent behavioral outcomes. Ausubel and Sullivan (1970) view the role of the peer group as providing a type of social status that parents do not provide. They suggest that peers offer both a source of social reinforcement distinct from parents and, in the new behaviors they encourage, an opportunity to escape the limited framework of family expectations for the adolescent member.

Cognitive Development

Cognitive structures including knowledge, information processing, problem-solving skills, and the use of memory and imagination, develop and change during adolescence (Bloom, 1990).

Piaget first described the qualitative change in mental abilities that occurs around the time of puberty (Piaget, 1970; Inhelder & Piaget, 1958). What occurs is more than a simple increase in cognitive skill or the sheer amount of information assimilated. Rather, a distinct way of processing information occurs, a change that Piaget describes as moving from concrete operational thinking to formal operational thinking. Between the ages of seven and eleven, a child's thought processes become increasingly capable of formulating cognitive relationships as information is organized by the child into quantities, classes, and categories; this is the stage of concrete operations. Mental constructions are still tied to what is perceived from the environment. Hypotheses devolve from the data at hand and not from mental abstractions. Around the time of puberty, however, cognitive development allows for increasingly abstract formulations and organization of data. The adolescent is mentally less tied to cognitions that are based on what is real or tangible--as in the prior concrete operational stage--and is increasingly able to comprehend what is hypothetical or merely possible. The adolescent becomes capable of deductive reasoning

and develops a facility in manipulating mental constructs in problem solving, in understanding probability, and in apprehending the distinction between belief and propositional logic. In this way, Piaget proposes, adolescence encompasses the final stage of intellectual development.

Elkind (1967) expands Piaget's theoretical formulation and considers the concept of cognitive development in adolescence through a formulation of adolescent egocentrism. He argues that the attainment of formal operational thinking introduces the developing adolescent to a kind of egocentrism distinct from that of young children. Childhood egocentrism occurs because of the inability of children to see a world larger than their own experience. Formal operational thinking allows for the possibility of abstract reasoning beyond immediate experience and being able to think, not only about one's own thoughts, but also about the thoughts of others. For Elkind this capacity to think about others' thoughts forms the basis of adolescent egocentrism because the individual finds it difficult to distinguish between his/her own preoccupations and what others are thinking. The adolescent assumes that because he/she is preoccupied with something, others are too.

Two concepts crystallize Elkind's formulation of adolescent egocentrism, that of the imaginary audience and the personal fable. Because of egocentrism, adolescents view themselves as part of both real and imagined social situations. Adolescents preoccupied with their physical appearance, for instance, assume that others are similarly preoccupied. Even when not actually in a social setting, they still anticipate the reactions of others to their appearance or behavior, reactions based on the premise that others are as critical or accepting of them as they are of themselves. The result is that the adolescent continually constructs and reacts to this imaginary audience. This process is augmented by what Elkind refers to as the personal fable. Because adolescents believe they are so important to so many people--the imaginary audience--they also see their thoughts and feelings as unique and special. They then construct a personal fable, replete with fantasies of personal

omnipotence, of personal immortality, and of personal suffering that no one else is capable of understanding (Elkind, 1967). Appreciating these elements of adolescent egocentrism may provide a key to explaining adolescent behavior and disturbance (Coleman & Hendry, 1990).

Kohlberg (1964, 1972, 1975) formulates a theory of cognitive development focused on an increasingly sophisticated ability to make moral judgments. Although his theory has been criticized for failing to represent the experience of females in their development of moral reasoning (Gilligan, 1982), it has persisted as an influence on theorizing about the development of a capacity for moral judgment by males. Kohlberg conceptualizes that the ability to judge develops through distinct and invariant stages, each representing a higher cognitive organization than the stage preceding it. His model identifies three distinct levels in a hierarchical development--the preconventional, conventional, and postconventional--each containing two distinct stages. During childhood, judgments are influenced by external rules and consequences, by the fear of punishment or the hope of reward (preconventional); later they are influenced by the hope of receiving social approval or by a desire to conform socially (conventional). It is the postconventional stage, as Kohlberg describes it, that typically occurs during adolescence. Assuming Piaget's developmental schema that assigns the ability for increasingly abstract thought to adolescence, Kohlberg theorizes that moral conceptualizations can exist independent of, and even contradictory to, moral systems. Postconventional reasoning is typified by consensus-driven norms, by the social utility of standards of conduct, and by individually determined values. This stage culminates in an ability to act out of individually valued universal principles such as justice, reciprocity, and respect for others. In developing a postconventional capacity for moral conceptualization, adolescents are able to demonstrate an ability for abstract ethical thought and become increasingly aware of the relativism of values and opinions. Within this theory, the central task of

adolescence and young adulthood is the discovery of an adult self through the development of a postconventional critical ability (Kohlberg & Gilligan, 1971).

Cultural Embeddedness of Adolescent Development

Developmental theorists have debated the relative influence of nature versus nurture in the development of personality and this is reflected in the literature on adolescent development. At one extreme are those who claim that personality develops in a sequence of internally predetermined steps irrespective of environmental conditions. These stage theorists are represented by the work of theoreticians such as Freud and Piaget. For them, the timing and nature of development may differ, but the sequence remains the same.

An opposing view has been expressed by anthropologists (Hollingsworth, 1928; Mead, 1928; Benedict, 1938) who have greatly influenced the debate on the cultural embeddedness of human development. They refute the notion of universal developmental stages and posit a theory of culture-specific development. Their cross-cultural research supports the position that adolescent behavior must be considered in relationship to the culture in which it occurs to be adequately understood. Mead (1942) specifically rejects the psychosexual model that considers the onset of puberty as precipitating upheaval or that erratic overt behavior should be expected. She theorizes that the manner in which a particular society interprets developmental milestones influences the resultant behavior and the intensity with which the transition is experienced. Benedict (1938) suggests that a culture's specific mores and customs will dictate whether or not development is experienced as smooth or conflictual. The culture itself creates the expectation of continuity or discontinuity in its members' development. In some cultures, therefore, adolescence as it is understood in Western society does not exist. The transition from childhood status to adult status, although tied to puberty and reproduction, is centered

around rite of passage rituals and ceremonies; adolescence is not perceived within those cultures as a relevant distinction of a phase of human development.

Psychosocial Development

The psychosocial perspective locates human development in the context of the social environment; this perspective considers it a fallacy to disconnect development from the environment in which it occurs. Perhaps its most influential proponent is Erik Erikson (1950, 1959, 1963, 1967, 1968). Erikson describes development as an evolutionary process based on a universally experienced sequence of biological, psychological, and social events that involves overcoming a series of crises inherent to this sequence (Maier, 1965). His theory focuses on the resolution of these various crises as fundamental to development, crises that are experienced in a continuum from early life through adulthood. He considers the social setting of the individual--in relation to parents and within the context of the family as well as in relation to the wider social environment--as the primary setting for these developmental crises to emerge and find resolution. Erikson interprets these normative crises as opportunities in the individual which help him to overcome obstacles to normal living. He articulates eight developmental crises, five occurring in childhood and three typical of adulthood.

The central task of adolescence, for Erikson, is the resolution of the conflict of identity versus role diffusion. During this segment of life, there are often dramatic fluctuations in the adolescent's ego strength. The primary resolution for this period is what Erikson terms "identity formation" and consists of two parts. Adolescents are increasingly preoccupied with questions about their essential character, of who they are. The key to resolving this quandary is found in merging past identifications, aspirations for the future, and contemporary cultural issues. Therefore, adolescents resolve the question first by taking into account the bonds that they have formed with others in the past as well

as the direction they hope to follow in the future. This sense of identity serves to anchor the individual in an essential experience of continuity in social relationships (Erikson, 1959). But for Erikson there is also a larger cultural component in resolving the issue of identity formation. Personal identity will reflect the orientation and priorities of the individual's reference groups; for the adolescent, these groups include family, peers, and the larger culture. Adolescents are particularly influenced by the impressions they feel others have of them and by others' expectations. The threat inherent in this struggle is that the external demands and expectations of family, peers, and the culture may be so great as to lead the individual to simply assume the roles expected without personally identifying internal goals with external expectations. Thus, for Erikson, adolescents cannot develop apart from the social context they inhabit; for this age group, that means particularly that agemates' values and norms influence identity development. Erikson feels that a real understanding of adolescent conflict must include an awareness of the peer-dominated nature of social values. The peer group becomes the setting for identity formation through experimentation, role playing, and social development (Erikson, 1968).

Transition in the Context of the Family

Adolescence as a transition period from childhood to adulthood requires a change from child-parent to adult-parent relationships. The changes that occur in this process include the alteration of roles, expectations, and a movement from dependency to increasing independence from the family for material support. Decision-making typically revolves less around parental rules and demands as the emerging adult asserts needs and goals independent of the family and as the desire to conform loses its attraction as the basis for action. The social network gradually assumes a more central place in the adolescent's life with a resultant lessening of physical and emotional investment at home.

Several theorists have asserted that it is impossible to study, assess, or treat adolescents without locating their experience in the context of the family system (Haley, 1973; Minuchin, 1974; Watzlawick, 1984). Family system theorists propose that the effective assessment and treatment of adolescents occurs most effectively when the family's history and dynamics are clear. Adolescent conflict and dysfunction are interpreted as symptomatic of a larger family dysfunction that creates blocks to each member's development.

The second decade of a child's life is marked by the realignment and redefinition of family relationships (Steinberg, 1990). Familial relationships are of particular importance when studying adolescent transitions precisely because they constitute the arena in which the earliest attachments are formed, the first experiences of separation and loss occur, and the learning of social skills takes shape (Hauser et al., 1991). Development occurs, in large part, by contrasting new attitudes, expectations, and behavior with the formative experiences of family life.

Several researchers have focused on the stressful nature of changes that occur in the relationship of adolescents with their parents (Buchanan et al., 1992; Steinberg, 1990; Eccles et al., 1993) utilizing a stage-environment fit formulation. Eccles (1993) suggests that optimal development during adolescence occurs when the needs of the adolescent fit the opportunities provided by his social environment. During childhood an asymmetrical relationship exists between the power and authority exercised between parent and child. Adolescents need to exercise increasing responsibility for themselves in order to make the transition to adulthood. A stage-environment fit perspective predicts that poor relationships will result when there is an asynchrony of fit between the adolescent's need for increased autonomy and the opportunities provided by parents. The lure of the peer group at this time is, in large part, that it offers the opportunity to experience

independence with agemates outside the home in a context that reflects a more symmetrical distribution of power and increased opportunities to express authority.

Many studies have examined the role of the family during adolescence. These suggest that even as the social world of the adolescent expands to include peers and others outside the family, it does not simply relocate from family to non-family relationships (Blyth, Hill, & Thiel, 1982; Brown, Eicher, & Petrie, 1986; Hunter, 1985; Hunter & Youniss, 1982). The connection between adolescents and their families might best be described as reciprocal and symbiotic; not only do families influence adolescent development, but adolescent development affects the family (Hauser et al., 1991). Family members are perceived by adolescents as important to their development by providing elements of support that peers do not, including affection, instrumental aid, intimacy and the enhancement of self-worth (Furman & Buhrmester, 1985).

Transition in the Context of the Peer Group

The peer group has long been recognized as a dominant force in adolescent development (Coleman, 1961; Erikson, 1963; Costanzo, 1970; Newman & Newman, 1976; Dunphy, 1980). During adolescence there is a profound shift in the structure of social life; peer relations become more intense and extensive as the adolescent begins to encounter different social demands and expectations, including dating, working, and spending time with peers unsupervised by adults (Damon, 1983). Interactions with peers provide a frame of reference for adolescents in their transition to a new identity; close friends, particularly, play an important role in confirming tentative personal beliefs (Duck, 1973). Peer interaction and peer pressure seem to be especially prominent in Western societies where age segregation and limited interaction with adults is a frequent occurrence and which, as a result, seems to amplify the influence of the peer group on the

adolescent's attempts to moderate the surrounding environment and in the selection of role models (Elliott & Feldman, 1990).

There have been numerous theoretical formulations of the way the peer group helps to define the transitions of adolescence. Coleman (1961) uses the concept of an "adolescent society" to describe a peer culture distinct from parents and family, with its own set of social roles, rules, and relationships. This society of peers serves as a subculture during adolescent transition wherein new roles and responsibilities can be assumed and practiced without many of the real consequences associated with the exercise of responsibility in the larger culture.

Erikson (1968) sees the peer group as a unique context, one set apart from external pressures, that provides an environment for interactional experimentation and the formation of identity.

Seltzer (1989) considers the individual's relationship to the peer group as perhaps the single most important phenomenon of adolescence, one that offers insight into adolescent behavior, adaptation and maladaptation, and behavioral problems.

The peer group itself is not a unitary phenomenon. Brown (1990) suggests a multi-tiered paradigm to describe the multiple forms that relationships and affiliations assume within the peer culture. These include two-person relationships encompassing friendships and dating; institutionalized peer groups, which are structured or controlled by adults; informal peer groups, which are structured and controlled by the peer group itself; interaction-based cliques of close friends with whom much time is spent; reputation-based crowds of peers, which tend to be larger than cliques and are defined less by the amount of time adolescents spend with them and more by the attitudes or actions in which the crowd engages. Brown also distinguishes between groups or cliques in which one is a member and reference groups to which an adolescent may or may not actually belong, but which nevertheless influence the individual's values and actions.

Peer affiliation changes from childhood to adolescence. Brown (1990) contends that four types of change in relating to peers occur between childhood and adolescence. First, in adolescence, peers command an increasing amount of time and account for a larger proportion of the adolescent's social network than in childhood. Beyond this, childhood peer groups tend to be anchored in the neighborhood and to remain under the close supervision of adults. During adolescence, the peer group tends to be anchored away from parents, whether in the school or larger neighborhood, and involve peer membership from beyond the immediate neighborhood associations of childhood. Third, affiliating with peers of the opposite sex becomes more common during adolescence in contrast to a stricter gender separation during childhood. Finally, peer interactions tend to expand into more complex relationships, beyond the dyadic friendships and small cliques of childhood to include membership in larger peer collectives or crowds. Brown concludes that these changes in peer affiliation transform the peer group into an increasingly complex heterosexual social system that forms the central element of adolescent social relationships distinct from those of children or of adults. Hartup (1983) affirms that the composition of the peer group or crowd, which includes school or neighborhood collectives, provides a type of reference group different from what is typical of either childhood or adulthood peer interactions. Dunphy (1972) asserts that the peer group acts to socialize the adolescent into heterosexual behavior.

Coleman (1979) posits that affiliation with the peer group changes over time; from a peak of interest in peer oriented activities in early adolescence there is a movement toward more exclusive dyads for courtship and romance in later adolescence. Brown (1986) reports that there is a shift in the perceived importance of crowd affiliation through the period of adolescence and concludes that younger adolescents tend to favor group membership more strongly than do older adolescents. Younger teenagers look to the peer group for emotional support, to foster friendships, and to facilitate social interaction. In

contrast to this, older adolescents are more likely to express dissatisfaction with the conformity demands of the peer group and to find their support, friendship, and interaction needs more effectively met through small, more intimate networks of friends.

Problem behavior, particularly adolescent anti-social behavior, popularly has been associated with peer group influence. Studies have emphasized the role of group identification in shaping behavior (Marsh et al., 1978; Weinreich, 1985). The probability of male adolescents committing delinquent acts has long been associated with the commission of similar acts by peers (Reiss & Rhodes, 1964; Johnson, 1979). Reports from adolescents associate disengaging from a delinquent peer group as being helpful in their own abandonment of delinquency (Rutter & Giller, 1983). Nevertheless, the influence of peers is not necessarily negative; Hartup (1982) states that the peer group influence serves important adaptive functions and contributes more to constructive socialization than to deviance.

Theoretical Rationale

A repeated finding in the literature is that the perception of social support is strongly related to positive health outcomes (Antonucci & Israel, 1986; Blazer, 1982; Sandler & Barrera, 1984; Sarason, Sarason, & Pierce, 1990; Wethington & Kessler, 1986). The rationale for this study is based on these findings and, specifically, is embedded within the theoretical formulation of social support articulated by Cobb (1976). Cobb considers the subjective perception of social support to be the salient feature in mitigating the effects of stress. He claims that perceived support has a buffering effect on stress; that is, the occurrence of events in the presence of social support should produce less distress than would the occurrence of events in the absence of social support (Thoits, 1982). However, there are inconsistent findings reported in the literature to support the buffering hypothesis (Cohen & McKay, 1984; LaRocco, House, & French, 1980).

Early insights into the significance of social embeddedness for psychological and physical well-being, and of the deleterious effects associated with its absence, were first proposed by Durkheim (1951) who examined the effects of the disruption of an individual's social network and the increased incidence of suicidal behavior among those who lack a supportive network. Social support has since been conceptualized as a protection against pathology (Caplan, 1974; Gottlieb, 1981). Epidemiological studies by Cassel (1974, 1976) have reviewed animal and human susceptibility to environmental disease; Cassel concludes from these studies that social support provides a buffering effect against stress. Cobb (1976) refined the construct of social support, postulating that it consists of information that leads to any of three outcomes: feeling cared for; the belief that one is loved, esteemed, or valued; and the sense of belonging to a reciprocal network. The idea that social support can act as a buffer against stress has been reiterated by several theorists (Brownell & Shumaker, 1984; Caplan & Killilea, 1976; Erickson, 1975; Weiss, 1974).

Significance of the Study

Social support research has rapidly expanded as a field of inquiry, yet it has been criticized for its lack of theoretical clarity, precise research designs, and comparability of results (Dean & Lin, 1977; Shumaker & Brownell, 1984; Thoits, 1982). Vaux (1987) considers many of the formulations of social support to be overly simplistic; he proposes that it is of greater heuristic benefit to consider social support as a metaconstruct consisting of three elements: social network resources, supportive interactions, and subjective appraisals of support. This study is designed to consider social support as a metaconstruct, and to test for the significance of specific types of supportive resources, their source, and the appraisals subjectively assigned to them.

There are several studies that have examined the relationship of social support and social relationships during adolescence. Studies of adolescent social networks have revealed a pattern of peer affiliation that tends to change in size, composition, and perceived importance over time (Cairns, Perrin, & Cairns, 1985; Garbarino, Burston, Raber, Russel, & Crouter, 1978; Montemayer & Van Komen, 1985). This research project has been designed to examine possible differences in perceived peer support from both younger and older adolescents.

Studies of the role of the family during adolescence suggest that the social world expands greatly for the adolescent to include peers and others outside the family (Blyth, Hill, & Thiel, 1982; Brown, Eicher, & Petrie, 1986; Hunter, 1985; Hunter & Youniss, 1982). At the same time, these studies suggest that the development of non-familial relationships does not simply act to replace the family, but the family retains a significant role in providing support to adolescents. Furman and Buhrmester (1985) have studied various components of support that adolescents report receiving from their family and from others. Parents were perceived by them to provide alliance, affection, enhancement of worth, instrumental aid, and intimacy; whereas peers were reported to provide companionship, and teachers were seen to provide instrumental aid. This research project further examines the perception of support from family and non-familial relationships and distinguishes among five types of support that these relationships may provide: emotional support, socializing support, practical assistance, financial assistance, and advice.

The relationship between stressful events and adolescent adjustment has received attention in the social support literature. Aro, Hanninen, and Paronen (1989) have examined the role of family, friends, and confidants in mediating the impact of adverse events on adolescents. Their investigation suggests that adolescents who lack parental or peer support are at risk for psychosomatic symptoms during stressful life events. This research study examines the positive or negative valence of support from family and peers

and the relationship of the perception of negative support or the perceived lack of support on adjustment.

Cauce (1986) has explored the relationship between friendship, social network variables, and social competence in a sample of lower socioeconomic adolescents. She reports that perceived peer emotional support and the number of reciprocated best-friendships contribute to positive outcomes on school competence, peer competence, and perceived self-competence measures. Cauce, Felner, and Primavera (1982) have examined the structure of social support and its relationship to adjustment for lower socioeconomic, inner city adolescents. They discovered three support dimensions--family support, formal support, and informal support--that varied in perceived helpfulness as a function of age, gender, and ethnic background. Gad and Johnson (1980) have studied the relationship between desirable and undesirable life events and the outcome variables of health status and adjustment among adolescents varying in socioeconomic status and report that adolescents from lower economic strata experience higher levels of negative life changes and that these are related to both health and adjustment, but not as a result of social support. The present research project focuses on adolescents of lower economic strata and examines the possible relationship between social support and adjustment; it goes further than past research on socioeconomic status and adjustment by distinguishing among various types and sources of social support.

The primary difference that distinguishes this research project from earlier studies of adolescent social support is the population being examined. Subjects in this study are drawn from among male adolescents in transition to residential care. Residential care differs from a random sample of normal adolescents, from a psychiatric adolescent population, and from populations of incarcerated youth. Barker (1985) distinguishes between residential treatment and residential care. Residential treatment refers to a total therapeutic program for those whose emotional and/or behavioral problems preclude

treatment in the community on an outpatient basis. Residential care, by way of contrast, refers to the provision of care for those who, for a variety of reasons, cannot live at home. Its closest analogy is to foster care, although residential care occurs in an institutional setting with several adolescents under the care of trained staff members and not in a foster family setting. Research on social support appraisals and behaviors as perceived by male adolescents in residential care has not been previously conducted.

Purpose of Study

This research project was designed to investigate the relationship between perceived social support from family and friends and the adjustment of adolescent males to a residential care facility. The period of adjustment under investigation involves a six month transition starting from the time of an adolescent's entrance into residential care. The source, mode, strength, and valence of perceived social support is systematically examined. Focus is given to three interrelated components. First, the subjective appraisals of social support by adolescent males during the period of transition into the residential care facility are determined. Second, distinct behaviors that are recognized by the adolescents as supportive are specified according to their source, type, and relative strength. Third, these specified social support appraisals and behaviors are examined with respect to their relationship to outcome measures of adjustment to residential care. This data set is used to examine and test for important theoretical and clinical issues within the context of social support theory.

This study was designed to test the theoretical construct of social support as articulated by Cobb (1976). This construct specifies that perceived social support produces a buffering effect on stressful events. That is to say that those who perceive that they receive social support will experience less stress than those who do not report receiving support. This study focuses on the specific event of transition to residential care

by adolescent males and the possible relationship between adjustment and perceived support.

A special attempt was made to respond to a criticism directed against social support researchers who in the past failed to consider the multifaceted nature of the social support construct, resulting in a lack of clarity and accuracy in reported outcomes. For example, two instruments were used to allow for greater precision in measuring the social support construct. The Social Support Appraisals Scale (Vaux, et al., 1987) was used to document the subjective appraisals of three distinct sources of support (family, friends, and others). The Social Support Behaviors Scale (Vaux, Riedel, & Stewart, 1987) was used to assess five modes of perceived support (emotional, socializing, practical assistance, financial assistance, and advice of guidance). Both scales provide a measurement of the relative strength or weakness of each facet of perceived support.

The study was crafted to focus on a subset of the adolescent population which has received much less attention in the social support literature than have adult populations. The subset of adolescents examined (those entering residential care) have not been studied previously in this way. As noted above, most of the studies in the extensive social support literature have focused on normal adults and on various hospitalized populations. Overall, the beneficial role of social support in lessening the effects of stress has been a robust finding in this literature. By examining a more vulnerable group in a non-traditional setting (adolescents in residential care), the investigation that is reported in this paper provides an additional test of the robustness of the social support construct.

The constituent components of this study (e.g., adolescent males, family and peer support, subjective appraisals of social support) offer a heuristically rich context for investigation. Theorists and researchers have done much to map the transitions--both normative and non-normative--of adolescence. The centrality of family and peers in the psychosocial world of the adolescent and, especially, the ways in which they influence

adolescent adjustment, has been postulated by theorists and supported in research findings. Numerous investigators have examined the role of social support in mitigating the effects of stress. Reports in the research literature of a correlation between the subjective perception of social support and lower levels of stress have been robust.

This study builds on this theoretical and investigative foundation by examining a non-normative group (troubled adolescents) in the process of a significant transition (to residential care). The study was designed to address the question of how robust the correlation is between social support and adjustment since the social support resources enjoyed by the participants in this study might be considered by many to be less than optimal, whether due to the poverty or family structure or social environment from which participants come.

The following research questions were addressed:

1. Does the perception of support by primary groups--family and friends--relate to adolescent adjustment to residential care? Is the family as a source of support more influential than support from friends, as some theorists suggest, or is support from friends more influential, as others posit?
2. Is there a relationship between certain types of social support and adjustment to residential care?
3. Is there a relationship between the perception of certain types of support--or the perception of little or even no support--and premature departure from residential care?

CHAPTER II

REVIEW OF THE LITERATURE

Overview

The connection between social ties and personal well-being has long been a subject of interest and inquiry in Western culture, literature, and philosophy. A Eurocentric, psycho-historical perspective dates the antecedents of social support theory at least as far back as the Middle Ages (Kemp, 1990). Although nothing approximating the modern, systematic study of social psychology existed then, what has been termed to be a "medieval psychology" assumed an essential interrelatedness of persons in a hierarchically ordered society, and attempts were made to examine the nature of phenomena that, in the twentieth century, have come to be identified with social support such as love, friendship, and social behavior. It has only been within the last century, however, that behavioral scientists have begun systematically to investigate this connection.

The influence of social relationships on individual adjustment has long been of interest to researchers, although the modern era of scientific inquiry into social support is generally dated from the early research of Durkheim (1897/1951) who considered the connection between the individual and social ties such as those with family, community, and church to be relevant in the prevention of suicide.

In a landmark study, Durkheim (1897/1951) hypothesized that the mass industrialization of the last century not only caused an unprecedented, massive migration of rural populations to urban areas but fundamentally affected the social links between individuals, a process that resulted in a disconnection from traditional sources of support,

the profound limiting of access to a social network to give and receive social support, and a reduction in the social constraints that had been based in the relatively stable environment of pre-industrialized communities on shared community norms, expectations, and consequences. Durkheim concluded that suicide was most prevalent among those with the weakest social ties and that a lack of social relationships increased the probability of suicide. In what was essentially a sociological investigation, Durkheim considered the social concomitants of suicide and articulated three categories of social contexts associated with its occurrence (egoistic suicide, altruistic suicide, and anomic suicide). Egoistic suicide occurs when an individual lacks integration into the larger society. The more that individuals are isolated from others, the greater the suicide rate; also, the weaker the links between individuals and their families the greater the rate of egoistic suicide. As egoistic suicide results from an inadequate integration into society, altruistic suicide results from an overintegration into a social group, with an overidentification with groups norms on individual behavior, leading to acts such as sacrificing oneself for the sake of a political or religious cause. Anomic suicide results from an undue stimulation or contraction of an individual's social world, such as when divorce occurs or when sudden wealth radically changes individuals' lives in ways in which they cannot cope. In investigating the role of social support, Durkheim included a broad cross section of social contexts including studying the effects of marriage, family associations, religious affiliation, political connections, and national identity on suicidal behavior.

The last thirty years has seen the emergence of social support research and theory as a distinct area of inquiry as investigators have sought to examine the nature of social ties and the relationship of supportive behavior to physical and mental health outcomes. Investigations of social support have emerged from several distinct directions. Vaux (1988) has identified three theoretical orientations that have driven social support research: a psychodynamic or childhood development orientation, a social exchange

theory-driven orientation, and epidemiological research in medicine. Others have identified epidemiological, community psychology, and child development orientations as the impetus for research (Sarason, Sarason, & Pierce, 1990).

Psychological inquiry has long appreciated the relationship between individual well-being and the social context in which it occurs. Freudian theory locates psychological development, in part, within the framework of early social relationships (Freud, 1905). Mahler (1968) has argued that childhood psychosis is rooted in failures of mother-child symbiosis. Bowlby (1969) considers early attachment to be central to psychological development; whether the infant attaches securely or anxiously to the mother will affect later social bonds over the entire life course.

Direct antecedents leading to the development of social support theory and research have been summarized by Heller and Swindle (1983). These include the contributions of Kurt Lewin (1935) who developed a theory of applied social psychology during the 1930s and 1940s; "reference group theory" of the 1940s and 1950s, which states that individuals use group values and standards as a frame of reference; Festinger's (1954) "social comparison theory" which hypothesizes that individuals evaluate their own opinions and attitudes by comparing them with group standards and the behavior of others; Schachter's (1959) "theory of affiliation" which states that the preference for social connectedness occurs when individuals are emotionally aroused or fearful, and that affiliation improves performance under stress. Significant differences have been noted between current social support models and earlier social comparison and affiliation conceptualizations, particularly between the current view of social support as an environmental variable and social comparison or affiliation models that are less interested in the structure of the social environment and more concerned with cognitive issues, such as how individuals utilize input for self-enhancement (Heller & Swindle, 1983).

A large body of literature has examined the relationship between social support and stressful life events. Early studies have examined the link between the number of stressful life events and psychological symptoms (Dohrenwend & Dohrenwend, 1974; Thoits, 1982). However, not everyone experiencing similar life events develops symptoms. It has been proposed that individuals' social support systems help buffer the effects of stressful life events on their psychological well-being. In studying the effects of stress on health, one approach theorizes that the intensity of a stressful event is a more salient factor than the type of stressor; thus, early models utilized stressful life events inventories or lists to create a range for events from least to most stressful (Dohrenwend, Krasnoff, Askenasy, & Dohrenwend, 1978; Holmes & Rahe, 1967). Coddington (1972) suggested that the relationship between life events and the onset of childhood diseases could be determined by summing the number of significant life changes occurring in children's lives.

Social support has long been viewed as a moderator of life stress. Cobb (1976) concluded that social support can protect people in crisis from a variety of negative effects related to health outcomes such as the incidence of low birth weight, arthritis, tuberculosis, depression, and alcoholism, as well as the amount of medication needed and the time required for recovery. Eaton (1978) suggests that members of a person's household provide support in times of crisis that helps prevent mental disorder. Others found that the absence of social support is a better predictor of psychiatric symptoms than the presence of stressful life events (Lin, Ensel, Simeone, & Kuo, 1979).

Epidemiological studies have long seen a connection between health outcomes and social factors. A review of the literature on susceptibility to mental and physical illness and the strength of social ties (Pilisuk, 1982) concludes that there is a pervasive relationship between health breakdown and social marginality and loss. Cassel (1974) suggests that contemporary interest in the role of social relationships in the etiology of

disease, is an extension of a longtime interest in environmental factors in the study of disease dating from ancient primitive attributions of healing properties assigned to air and water to modern investigations of microorganisms. In studying mortality in an elderly population, Blazer (1982) found that measures of the availability of social attachments, the frequency of social interaction, and the perception of support successfully predicted mortality within 30 months. Outpatients with minor affective disorders have been found to have deficiencies in their social networks (fewer attachment figures, fewer close relatives and friends, and fewer social contacts) when compared to a matched control group (Brugha et al., 1982).

Focus of this Study

The research literature on social support is both vast (over 3,000 studies have been published in the last thirty years) and compelling. There is a kind of "face validity" that has accrued to the popular conceptualization of social support that suggests that support from others should be beneficial to those experiencing a variety of physical and psychological stressors. Empirical investigations, however, have often demonstrated weaknesses in many studies including their theoretical clarity and the ways in which constructs have been operationalized, so that results have sometimes been ambiguous and often have not been able to be compared across studies.

The present study builds on the theoretical foundation of Cobb (1976) and the later articulation and amplification of that theory by Vaux (1987, 1988). The underlying rationale for this study from prior research and theory is presented here, first, through a consideration of how social support is defined, a description of problems in defining the construct, and an articulation of the construct as it is used in this study. Second, since this study is interested in the provision of support by specific groups, sections of this review of the literature include a discussion of psychological investigations involving social

support by family and social support provisions by friends and peers. Third, this study investigates a particular subset of a special population: adolescent males in transition to a residential care institution. A discussion of relevant studies is included concerning the constitutive elements of social support during adolescence in general, and leading finally to a consideration of the state of the field of inquiry into adolescents in transition, and studies of adolescents in resident-institutional settings.

Defining Social Support

Cassel (1974) was the first to formally address the link between social relationships and health outcomes in the contemporary sense of scientific investigation into the phenomenon of social support. In a consideration of psychosocial factors in disease etiology, Cassel reviewed a large body of animal and human research concerning such factors as population density, rapid social change, and social disorganization, and proposed four principles to explain how the disruption of social connections affects an individual's susceptibility to disease. The first is the principle of social disorganization which suggests that, in human populations, increased susceptibility to disease occurs in social environments in which there is evidence of social disorganization (such as familial disorganization or the disruption of social connections). The second is the principle of domination and subordination which affirms that not all members of a population are equally susceptible to the effects of the same social processes, and that those who are more dominant in a social environment are less prone to morbidity and mortality outcomes than subordinate members. Cassel's third principle concerns the buffering effect of social connections that provide, by the nature and strength of group supports, protection for the individual against specific physiological or psychological consequences of social disorganization. Finally, Cassel posits a principle of generalized stress that views variations in group relationships as enhancing susceptibility to stress in general and is,

therefore, not just limited to a specific etiological role. Cassel was concerned with the fact that the health consequences of social disorganization do not affect all people in the same way and that differences can be explained by considering factors such as the importance to the individual of social relationships that become disordered, the position of the individual in the status hierarchy of a group, the degree to which a population is unprepared for the effects of a given stressor, and the nature and strength of group supports available to the individual. Each of these social factors, Cassel concluded, plays a significant role in disease etiology.

Caplan (1974) examined the nature of support systems as social aggregates that provide individuals with opportunities for feedback about themselves and the environment, and which offer validation of their expectations of others. Caplan considers the characteristic attribute of those social aggregates that act as a buffer against disease to be that they deal with members as unique individuals, showing personal interest, articulating what is expected, offering guidance, judging performance, and respecting the individual. Caplan believes that support systems buffer the individual against defective feedback from the general social environment in two ways: first, by offering guidance and direction to the individual, assisting in the interpretation of feedback cues that otherwise would be incomprehensible; and, second, by acting as a refuge or sanctuary from the stressful environment of everyday life. Caplan suggests that strategically placed supportive others in areas such as the community, at home, in church, and in recreational venues can effectively buffer an individual against a largely stressful world. In this way, Caplan defined support systems as "continuing social aggregates (namely, continuing interactions with another individual, a network, a group, or an organization) that provide individuals with opportunities for feedback about themselves and for validation of their expectations about others, which may offset deficiencies in these communications within the larger community context" (Caplan, 1974, p. 4).

Cobb (1976) reviewed early evidence that supportive interactions provide a buffer against health consequences of life stress and summarized earlier findings that found that social support protects people in crisis from pathological states ranging from low birth weight, higher levels of mortality, arthritis, tuberculosis, depression, alcoholism, and social breakdown. Significantly, Cobb refined the definition of social support to consist of: "information belonging to one or more of the following three classes: (1) information leading the subject to believe that he is cared for and loved; (2) information leading the subject to believe that he is esteemed and valued; and (3) information leading the subject to believe that he belongs to a network of communication and mutual obligation" (p. 300). Cobb distinguished between activities that might be supportive, such as repairing a broken leg in a hospital, which he terms "material services", and actual social support, which focuses on specific types of information rather than on goods or services. He describes the process of social support as part of human development from the beginning of life and continuing through adulthood, suggesting that social support facilitates coping with crisis and adaptation to change throughout life (including areas as diverse as during hospitalization, illness, life stress, employment termination, aging, bereavement, and the threat of death).

Henderson's (1977) research considered social support in terms of attachment theory. It views social bonding as an evolutionary process in which the gradual expansion of relationships from one's parents to the development of a social network is related to the network's ability to provide psychosocial supplies to the individual. Only under stressful conditions does this affectively positive interaction with others constitute "social support". It hypothesizes that depleted primary group interaction is related to morbidity.

Social support has been conceptualized as being embedded in the broader concept of social networks (Mitchell & Trickett, 1980). This approach recognizes the social support system as an individual's salient reference group, consisting of family, friends, and

others in a subjectively constructed configuration. The social network is seen as the individual's total social field, including the salient reference group and others in the social environment. These networks can be categorized in a multitude of ways, including size, density of connections among network members, types of exchanges, strength of ties, and durability of social relationships over time.

Gottlieb (1981) describes social support as consisting of significant others who help individuals deal with particular stressful events by helping them to mobilize their psychological resources to address emotional problems; who share their tasks; and who provide them with information and advice or with tangible assistance such as money, tools, materials, or skills. For Gottlieb, support systems are more than the mere summing of the number of friends or family members available to an individual, but are contextual resources that buffer the effects of particular stressful events by mobilizing supportive resources from being potentially helpful to becoming actually helpful in a given stressful situation.

Increasing precision of measurement has led researchers beyond merely reiterating the global finding that support is more strongly related to positive than to negative life changes. Such broad measures of social support have gradually given way to efforts to distinguish among its various components including increasingly specific questions about different dimensions of social relationships that are related to distinct dimensions of well-being (Rook, 1987). For example, more than a decade ago, researchers noted that there are probable gender differences in the buffering effect of support (Sarason, Levine, Basham, & Sarason, 1983).

Kahn and Antonucci (1980) consider social support to be a significant determinant of well-being, both for its direct and moderating effects on stress. They articulate three components of support: positive affect, affirmation, and aid. Support is provided through the structure of the social network, seen most clearly in the concept of the "convoy" or

reference group around an individual with whom the individual moves through the life cycle. Kahn and Antonucci describe the convoy as those persons on whom the individual relies for support at any given time as well as those who rely on the individual for support. Although membership may change over time and the ability of members to provide support may vary, the convoy remains the salient context of social support for the individual through life. Others (Schulz & Rau, 1985) have reiterated the importance of support networks and kin relationships over the life course, noting that a characteristic of such close networks is that they remain relatively stable through life.

House (1981) defines social support in terms of its helpfulness to individuals in resolving problems. Thus it is seen as an interpersonal transaction which includes one or more of the following: the expression of emotional concern, such as loving, liking, or being empathic toward another; the provision of instrumental aid, such as specific goods or services; the sharing of information about the social environment; and appraisals relevant to one's self-evaluation. House locates the provision of social support in relationships with others who are in a position to help, such as family, friends, care-givers, or co-workers.

Merely describing social support in terms of its availability has been viewed by some as inadequate (Pearlin, Lieberman, Menaghan, & Mullan, 1981). They suggest that having access to a social network or being embedded in a network is not of itself sufficient to constitute social support; support must also include such factors as the quality of the relationships in the social network, and particularly the trustworthiness between network members; and the actual recourse made to support resources by mobilizing and using them.

In a summary of the social support literature, Brownell and Shumaker (1984) have distinguished among three kinds of effects of social support on physical and mental health. The first are direct effects of support on recovery from illness by facilitating appropriate

health behaviors such as seeking medical attention or following health regimens. There are also indirect effects of support that influence individual well-being by decreasing the number or intensity of stressors to which an individual is exposed (for example, by helping individuals resolve smaller problems before they evolve into larger ones). Finally, they report an interactive effect of social support on stressful life events in the way that they mitigate the adverse effects of stress (for instance, by helping individuals recognize that they are coping as well as others in the same circumstance).

Lin, Woelfel, and Light (1985) have defined "social resources" which they state in preference to the use of the term "social support". They posit that "the degree of access to and use of strong and homophilious ties are indicators of social support" (p. 249). The emphasis here is on an individual's access to a support network and the actual support provided.

Brownell and Shumaker (1984) find that a recurring problem exists in the ways early studies of social support operationalized the concept of support to include: the number of social connections a person might call on (such as the number of family and friends), various qualities associated with support (for instance, how trustworthy a supportive other might be or a particular skill others might possess), the potential availability of support and its actual use, and satisfaction with support received. In addition, they report that methods for measuring social support have varied greatly across early studies, muddling the comparability of results and the applicability of findings.

Problems in Defining the Social Support Construct

Early social support research was hampered by an imprecision of definition and operationalization of the social support construct. In a survey of the literature, Thoits (1982) describes three major problems. First, investigators often have not formulated precise conceptual definitions of social support, resulting in an inability to identify those

aspects of support that moderate the effects of stressful events. Second, cross-sectional studies tended to confound the direct and interactive effects of life change and social support. Stressful events can alter the support available to individuals and support can affect the likelihood of stressful events occurring. Third, the theoretical relationships between life events, psychological symptoms, and social support were not clear. Others have reiterated these shortcomings, notably Lin and associates (Lin et al., 1985) who have found definitions of social support to be as diverse as those listing constituent elements of support-- such as emotional support, instrumental aid, information, and appraisals (House, 1981)-- or as provisions--such as attachment, social integration, opportunities for nurturance, reassurance of worth, a sense of reliable alliance, and obtaining guidance (Weiss, 1974) --or by describing the general significance of support through underlying processes such as attachment (Bowlby, 1969; Henderson, 1977; Rutter, 1981).

In a critique of social support research to date, Wood (1984) articulates several problems with the way the construct has been operationalized, particularly the tendency to let definitions be overly-inclusive and general, (e.g., whatever environmental factors promote health; vague references to psychosocial assets). She is particularly critical of those definitions that describe as supportive only those relationships that are beneficial, because they tend to predetermine a positive association between support and outcome measures. Wood proposes the need for specificity in the assessment of social support, including assessing specific situations, targeting specific groups for assessment, stage of the life cycle, gender, sources of support, and support needs. She asserts that there are three major approaches to measuring social support: assessing the perceived availability of support, assessing satisfaction with support, and by specifying the actual behaviors that constitute social support. She notes that there are weaknesses associated with each approach. For instance, assessing perceived availability and satisfaction with support may lead to circular reasoning in research that concludes that people who see themselves as

having supportive relationships are better off than those who do not; or in studies of populations with certain disorders, such as depression, that may distort subjective appraisals of social support in a negative direction. She notes also that measures that assess the number of occurrences of supportive behaviors may simply reflect a recipient who is more needy or stressed instead of one who actually is lacking the provision of supportive behaviors, thus confounding need with support (Wood, 1984). Among Wood's recommendations is that studies of social support include comparisons between assessment instruments and in vivo behavior, since most instruments lack behavioral validation. The current study includes subjective appraisals of support as well as supportive behaviors and is linked to in vivo behavioral outcomes.

The Buffering Hypothesis

The buffering hypothesis has been stated succinctly by Thoits (1982) in the following way:

Individuals with a strong social support system should be better able to cope with major life changes; those with little or no social support may be more vulnerable to life changes, particularly undesirable ones...the occurrence of events in the presence of social support should produce less distress than should the occurrence of events in the absence of social support. (p.145)

Early social support theorists (Caplan, 1974; Cassel, 1974; Cobb, 1976) have referred to this buffering effect as the salient feature of social support. Others (Heller & Swindle, 1983) describe the buffering hypothesis in this way:

Individuals experiencing significant life stress, but with strong social support, will be protected from developing symptomatology associated with stress. The expectation is that individuals experiencing high stress but with good support

resources should develop significantly less symptomatology than individuals experiencing high stress but with little social support. (p. 89)

Cohen and Wills (1985) have investigated the differences between main and buffering effects of social support. They describe a "main effect" as a generalized beneficial effect of social support that is related to an experience or perception of overall well-being due to the supportive network providing positive affect, a sense of predictability and stability, and recognition of self-worth to the individual. Their research suggests that this is related to the size of the social network, since large social networks are better able to demonstrate supportive provisions more consistently than smaller networks. Theoretically, integration in a social network helps recipients to avoid negative experiences in general. In a review of studies that test the association between social support and well-being, Cohen and Wills (1985) investigated whether the connection is attributable more to a main effect or a buffering effect. They conclude that evidence is present to support both hypotheses. Evidence for a buffering effect was found when social support measures assess the perceived availability of supportive resources that are seen by the recipient as responsive to the needs elicited by specific stressful events, while evidence for a main effect was discovered when measures of support assess the degree of personal integration into a social network.

Another investigation into the buffering hypothesis (Lin et al., 1985) concludes that individuals tend to show greater depressive symptoms if they experience a life event that they find to be more significant or undesirable; it confirmed a buffering effect and found that symptoms were reduced when support came from strong rather than weak social ties.

Social Support as a Metaconstruct

The present study utilizes instruments based on the work of Alan Vaux and associates (Vaux, 1985, 1987, 1988; Vaux & Athanassopoulou, 1987; Vaux, Burda, & Stewart, 1986; Vaux & Harrison, 1985; Vaux et al., 1986; Vaux, Riedel, & Stewart, 1987; Vaux & Wood, 1987). He builds on the definition of social support by Cobb (1976) that views the construct as consisting of the belief that one is loved and cared for, esteemed and valued, and part of a network characterized by communication and mutual obligation.

Vaux (1988) has commented at length concerning the complexity and confusion in the social support literature over the extent and limitations of the construct. He has suggested that differences tend to coalesce around three issues: the range of social ties relevant to support and the relative importance of the objective elements of social relationships, the various forms that support might take, and the salience of subjective perceptions of support as opposed to actual supportive behavior.

In Vaux's taxonomy, social relationships research can be divided into investigations of the degree of an individual's "social integration" (which considers factors such as marital status, contact with friends, and membership in voluntary associations); examinations of "intimate relationships" (which consider phenomena such as marital breakdown and availability of confidants); and "social networks" (which examine such elements as the size, density, proportion of family to friends, and homogeneity among network members). Vaux sees support networks as subsets of larger social networks. He restates the argument of some researchers for the necessity of focusing on particular subsets of the social network in order to assess specific types of support in particular circumstances. He also argues in favor of the development of comprehensive support network measures that identify particular persons providing specific types of support in order to avoid the assumption that all social ties are supportive.

Vaux's taxonomy also addresses the various forms of social support, the discussion of which has been confused in the social support literature by the way some categories tend to be defined and others merely listed, depending on the researcher and the study. He reports that the early literature on social support made reference only to broad categories of helping activity and that subsequent efforts to distinguish among various types and functions of support have been largely confusing (including those that distinguish between instrumental and affective support; tangible and intangible support; concern, assistance, valued similarity, positive interaction, and trust; emotional support, cognitive guidance, tangible aid, social reinforcement, and socializing; emotional, appraisal, information, and instrumental support); he includes in this listing his own attempts at categorization (Vaux, 1982) of emotional support, socializing support, practical assistance, financial assistance, and advice/guidance as constitutive elements of the social support construct.

Vaux considers social support to be a metaconstruct consisting of at least three facets: resources, behaviors, and appraisals (Vaux, 1985). Supportive "resources" refer to the size of a supportive network, the number of accessible relationships which an individual has; "behaviors" refer to the content of support, the provisions that a relationship is able to--or perceived to-- supply; "appraisals" refer to the subjective judgments an individual makes regarding the availability, desirability, source, strength, and helpfulness of support (Vaux, 1987). His own path analysis investigation of the relationship among these facets of support has led Vaux to assert that resources affect behaviors directly which affect appraisals directly, but that resources do not directly affect appraisals (Vaux, 1987).

This taxonomy is sensitive to the extent, content, and composition of support. Vaux (1985) states that the content of social support varies considerably (for instance, the stressors and demands on inner-city adolescents do not necessarily correspond to the

stressors experienced by a corporate executive) and suggests that variations in the levels of social support may be due in part to differences such as the culture and age of subjects.

The phenomenon of social support can be said to include both objective and subjective elements, and so, Vaux's taxonomy considers the distinction between perceived support and actual supportive behavior to be significant, arguing for the primary importance of taking into consideration subjective appraisals in the assessment of support. He notes that attempts to assess objective elements (such as the number of formal affiliations to organizations and groups, the number of accessible friends and relatives, and the frequency of contacts) often include subjective appraisals of satisfaction and involvement. Further, Vaux argues that the subjective perception that one is supported or has the skill needed to cope with a stressful situation provides comfort and diminishes the perception of threat even when the objective basis for that conclusion is doubtful. Finally, he argues that perceptions are of importance because objectively supportive acts that go unrecognized by the individual for whom they are intended will not provide support.

The present study utilizes instruments developed by Vaux to assess supportive appraisals and behaviors from two resources (family and friends). Following from Vaux's taxonomy, it assesses perceived social support as most relevant to outcome measures of adjustment.

Perceived Social Support

Sarason, Pierce, and Sarason (1990) have affirmed the importance of the individual's own perceptions in assessing the construct of social support. They state that:

Perhaps one of the most important developments in the social support literature is the agreement that the only aspect of social support that is related to health outcomes is perceived support, or the belief that help would be available if needed, as contrasted with help that is actually received. (p. 98)

In summarizing the literature on perceived support, Sarason, Sarason and Pierce (1990) draw two conclusions. First, reports of received support differ significantly depending on whether the one reporting is the recipient or another respondent. Therefore, different sources of evaluations of support (e.g., respondent versus other adolescents, parents, teachers, or trained observers) are not equivalent; the recipient's subjective evaluations most strongly correspond to health outcomes). Second, Sarason asserts that an individual's perception of the need for support, and of its availability when needed, actually affects the degree of stress experienced; this adds to the importance of assessing the individual's perceptions of support.

Several studies reinforce the significant relationship between perceived social support and health outcomes. In a study of the relationship between social support and mortality in an elderly population, Blazer (1982) assessed three dimensions of social support (roles and available attachments, perceived social support, and frequency of social interaction) and found that impaired perceived social support was the most strongly related to mortality at 30 month follow-up. Sandler and Barrera (1984) conducted two studies to assess the effects of different facets of social support (received support, perceived satisfaction with support, and characteristics of the social network) on psychological symptoms. They reported that the strongest positive effect of support on symptoms was related to the perception that subjects were receiving adequate support. In evaluating the literature on stress and social support, Wethington and Kessler (1986) report that the stress-buffering effect is most consistently found when support is measured as a subjective appraisal of the availability of support and that perceived support is more important than received support in predicting adjustment to stress. They suggest that the perception of support may influence the effectiveness of received support.

Not only is the concept of social support multidimensional, but perceived support is itself multifaceted. Sarason and associates (1990) distinguish between measures of

perceived availability of support and perceived satisfaction with support as distinct dimensions of the construct (Sarason, Pierce, et al., 1990). They also draw a distinction between perceived support as a personality component and as a perception based on specific experience; if it is based on personality (a general feeling that one is cared for and loved), it should remain relatively stable over time; if based on specific experience, it may deteriorate over time (as a person is exposed to stressors and fails to perceive support to be available or satisfactory).

A criticism of subjective appraisals of support (Henderson et al., 1978) is that qualitative self-report measures may be influenced by psychological states and not vice versa. This is contrasted by the view of Lakey and Heller (1988) that the general appraisal of being cared for and valued is not related to a specific supportive relationship or experience but reflects instead a personality variable, a generalized sense of being supported that is incorporated into the personality.

Provision of Support by Families

Family support encompasses a broad range of functions. It includes the provision of elements basic to survival, including food and shelter. It extends to the provision of a social context that, because of its duration and pervasiveness in the life of the very young, tends to influence the socialization of its members for life. What distinguishes family support from other sources of support are the lifelong ties and mutual obligations that form its context (Eggert, 1987).

Caplan (1976) has described several supportive functions families provide its members that include: acting as a collector and disseminator of information about the world, as a source of ideology, as a guide and mediator in problem solving, as a source of practical service and concrete aid, as a haven of rest from a stressful world, as a reference group, and as a validator of identity for its members. Caplan believes that the family

contributes to emotional mastery by augmenting the individual's efforts to master and control emotions related to crisis; by adding to its members' capacity to tolerate frustration; by helping members work through issues related to loss and deprivation; by helping members who are experiencing stress and loss to maintain a realistic perspective; and by providing consistent love, respect, and transitional objects. Caplan identified factors that impede these supportive functions by families, including the lack of free communication among members; treating family members as manifestations of other objects or polluting family exchanges with past psychological conflict; and when family ideology and its code of behavior is not shared by members, especially the obligations of mutual concern and the role of the family in monitoring and controlling dissonant behavior.

Perhaps the most basic task of the family is to produce healthy members, both physically and psychologically. Failures of families to support their members at this level can take several forms, the extreme of which is physical abandonment or the failure to provide basic food and shelter. Less extreme but no less important is the role of parental support during the process of psychological and emotional development in children. Social development begins with interactive experiences with the primary caregiver in infancy and leads to experiences with other members of the child's social world. Negative experiences early in life have a critical impact on later social and emotional adjustment (Flaherty & Richman, 1986; Kahn & Antonucci, 1980). As has been noted, early theorists such as Freud (1905) conceptualize the psychosexual development of the individual in the relationship between parent and child. Later theorists such as Mahler (1968) describe the emergence of early psychological dysfunction in the context of failed symbiosis between parent and child.

Bowlby (1969) considers early attachment, particularly between mother and infant, to be central to the psychological development of the child insofar as it creates a stable

base from which the infant can explore the environment. For Bowlby, attachment develops through phases; over time the infant gains confidence in exploring the environment in relationship to the mother-figure through such actions as approaching her, moving away from her, clinging, and returning to her as a haven of safety. Empirical investigations led Bowlby to conclude that the young child's desire for the mother's love and presence is as great as the desire for food and that her absence leads to a powerful sense of loss and anger. The lifelong sense of social connection begins with the relationship between infant and mother-figure; if the mother is consistently available to the child in a nurturing and non-rejecting way, the infant will learn to attach securely to her; if she is physically or emotionally unavailable, rejecting, or inconsistently available, the infant will attach anxiously to the mother-figure. In Bowlby's view, this ability of an infant to attach securely to the mother-figure, or failing that, if an infant anxiously attaches to the mother-figure, will affect social bonds over the entire life course.

The attachment needs of children have been further investigated by Furman and Buhrmester (1985) who examined the characteristics of different members of the social network of intermediate-grade school children. They report that different members of a child's network provide different types of support, and that mothers and fathers rated higher than grandparents, peers, siblings, or teachers for the provision of support, and that mothers rate higher than fathers. Parents are most often turned to for affection, the enhancement of worth, a sense of reliable alliance, and instrumental assistance. Olivieri and Reiss (1987) further examined the distinctive roles of mothers and fathers among adolescents. They report that generally adolescents are more consonant with mothers than with fathers regardless of the gender of the adolescent. They suggest that, in general, mothers spend more time than fathers interacting with children, and interact in caretaking activities as opposed to fathers who tend to spend time with children in play. Adolescents

attempt to interpret emotional cues from their parents toward them, other kin, and friends and to use this information to regulate the quality of their own social ties.

Mothers tend to be more influential regarding the adolescent's social ties to kin whereas fathers tend to be more influential regarding the adolescent's ties to friends.

The formal study of family support systems began with Sussman and associates who investigated the strength of supportive family ties under conditions such as physical distance, as when families move from one location to another (Sussman, 1959); emotional independence, such as demands on parents to support their grown children at critical times during the establishment of an independent life (Sussman & Burchinal, 1962); or support extended through formal legal connections such as trusts and wills (Sussman, Cates, & Smith, 1970). Sussman argues in favor of the adaptability of family members to continue to provide support over great distances, and between generations long after children become adults.

Family support also functions to limit the effects of physical illness (Gallagher, Beckman, & Cross, 1983) and depression (Lin, Dean, & Ensel, 1986). In a study of indicators of family support on depressive symptoms in adolescents, Cumsille & Epstein (1994) report that family cohesion and support from family members was inversely related to depressive symptoms and that social support from friends did not act as a buffer against depression. Subjective appraisals of dissatisfaction with the cohesiveness and adaptability in their families were the strongest predictors of depressive symptoms. In examining the relationship between family and peer relationships on adolescent depression and anxiety, Sabatelli and Anderson (1991) conclude that more than parent-child dynamics may be critical in understanding the social support of depressed adolescents. They report that the highest reports of depression were by those who felt the least support from their peers and who perceived the marital dyad between their parents to be the most dysfunctional. The lowest levels of reported anxiety among adolescents were found in those with the lowest

dysfunction between parents and those with the strongest mother-child reciprocal relationships.

Family support has been linked to adaptation processes when dealing with stress. Eggert (1987) has summarized the role of family communication patterns in dealing with stress. She suggests that the influence of family support is pervasive since members have life-long involuntary ties and mutual obligations. She states that there are four essential elements of communicated family support (the content of supportive exchanges, the social network component involving specific family resources, the process by which support is communicated, and the outcomes of family support) which are based on four premises from empirical investigations of family support: first, that most family support occurs through communication; second, that the mere existence of family ties constitutes support; third, that the content of family support can be located on a continuum between supportive and non-supportive; and that communicated support modifies family functions such as nurturing, instructing, socializing, and adaptation responses to stress. Thomson and Vaux (1986) have also investigated the dynamics of stress in the family as a social system. They hypothesize that family members import stressors into the family with greater stressful effects for parents than for adolescents and greater for enmeshed than for disengaged families. They found that stressors arising outside the family are associated with stressors arising inside the family (the importation of stress) and that stress effects for one member are associated with distress reported in other members (the transmission of stress). Thomson and Vaux also report that the relationship between the presence of a stressor and individual distress was equally strong for those high and low in social support, contrary to the buffering hypothesis. In a recent study (Hashima & Amato, 1994), associations among poverty, social support, and parental behavior were examined; perceived social support for parents was found to be negatively associated with punitive behavior by parents toward their children, particularly in lower socioeconomic families.

Families influence their members' social role adjustment in a number of ways.

Forman and Forman (1981) examined the relationship between characteristics of family social climate (including family cohesion, encouragement of individual growth and assertiveness, family organization, and control) and personality functioning in adolescents and concluded that the total functioning of the family system (specifically, families in which relationships are emphasized and conflict is acknowledged and expressed) is more strongly correlated with lower anxiety in adolescents than are any of the individual characteristics of the family's social climate. A later study of adolescent coping styles (Shulman, Seiffge-Krenke, & Samet, 1987) found that adolescent perceptions of family climate (such as family support and family cohesion) are related to adaptive and maladaptive coping with specific situations they encounter. It indicates that adolescents who perceive a lack of family support or who report an over-controlling family climate demonstrate a higher level of dysfunctional coping when compared to those who report family cohesion and respect for individual development.

A large study ($N=10,000$) of adolescents (aged 14-18 years) contrasted adjustment measures for subjects reporting different levels of emotional autonomy and perceived social support from their parents (Lamborn & Steinberg, 1993); they report that subjects high in emotional autonomy but low in perceived social support had lower adjustment scores (e.g., internal distress, behavior problems psychosocial development, and academic measures). Another recent study of the relationship between parental support and coping, using a sample of college students (Valentiner, Holahan, & Moos, 1994) concludes that parental support not only is related to adaptive coping strategies but that the perception by students of event controllability influences the way in which perceived social support functions. With controllable events the perception of parental support affects psychological adjustment indirectly by fostering self-efficacy which aids further coping efforts; with uncontrollable events, perceived parental support affects psychological

adjustment directly by enhancing feelings of social integration, attachment, and feelings of self-esteem and self-worth.

In a preliminary investigation of the psychoanalytic thesis that suggests that the quality of adult relationships derives from earlier childhood attachment experiences, Flaherty and Richman (1986) correlated perceptions of medical students' early relationships with their parents with the perceived quality of their current support network; they found that perceived parental affectivity and warmth in childhood is significantly related to levels of adult social support but is unaffected by the perceived degree of earlier parental control. Smetana (1988) examined adolescent-parent relationships from a social cognitive perspective and proposes that these relationships can be understood in terms of the affective realignments typical of adolescence as well as in the ways that adolescents and parents interpret their social worlds. They view parent-child conflict in terms of competing goals in social situations as parents' and adolescents' understanding and construction of expectations and responsibilities in the family social system change.

The functions of relationships change during adolescence. Hunter and Youniss (1982) assessed three types of relationships (peer friendships, mother-child, and father-child relationships) in 4th, 7th, 10th grade, and undergraduate students in the domains of behavior control, intimacy, and nurture and found that parents exert greater control than do friends across age groups; that intimacy is higher with parents than friends in the early grades but that friendship intimacy surpasses that with parents by 10th grade; and that nurture (giving and helping) remains constant with parents but increases with age among friends. Hunter (1984) examined unilateral and mutual socializing procedures between adolescents and mothers, fathers, and friends in the context of adolescents either seeking social verification from parents and friends or in parents and friends exerting direct influence on them. In both contexts, friends were judged to be more mutual and parents

more unilateral; the dominant style of adolescent social interaction with parents was unilateral social verification.

Youniss and Smollar (1985) have examined relationships between adolescents and their parents. They report that adolescents do not tend to perceive a single relationship with "parents" but perceive distinct relationships with mothers and fathers. The relationship with fathers seems to be perceived as a continuation of how they have been perceived since childhood; fathers are seen as those who know best how their children should act, help shape long term goals, and are looked to for validation and approval, while fathers perceive conformity by their children as a sign that they are acquiring the behavior and standards that will help them enter adult society, and demonstrate less interest in the child's here and now interests. This filter of paternal expectations is viewed by Youniss and Smollar as a hindrance to psychological development as it constricts both the father's perception of the child as an independent individual and the adolescent's perception of self. Mothers share some of the characteristics of fathers insofar as they communicate expectations of standards related to adulthood, but there are important differences. Mothers maintain more consistent contact with their adolescent children and are not focused primarily on their children's future; they tend to act as both disciplinarian and advisor, serving as confidants as well as authority figures.

Numerous studies have shown a positive association between social support and mental health. In a study of social support and self-esteem in adolescents during stressful life events (Hoffman, Ushpiz, & Levy-Shiff, 1988) investigators found that perceived levels of support differ among mothers, fathers, and friends. Maternal support was most strongly related to self-esteem, support from friends was more influential when the mother was absent, and paternal support had little effect on esteem. In a study of dimensions of family interconnectedness, Wood (1985) examined two dimensions of family boundaries, (interpersonal and generational) and reported that weak intergenerational boundaries are

associated with increased levels of psychological dysfunction for identified patients and their siblings and that weaker interpersonal boundaries (measured by elements such as time spent together, shared personal and emotional space, lack of privacy, and group decision -making) is related to psychological dysfunction for identified patients only.

Utilizing family support may also be related to the level of functioning of the family member in need. An early study of the relationship between social networks and social adjustment in mental health clients and a community sample (Froland, Brodsky, Olson, & Stewart, 1979) found that community subjects tend to look to immediate family members for support, as opposed to better functioning chronic clients who turn to professional contacts, or poorly adjusted chronic clients who look only to friends for support. Attempts have even been made to develop instruments to differentiate normal adolescents from those with early signs of incipient psychological disorder (Nitzberg, 1980) with the need for social support from parents and friends as the salient discriminating feature.

In a study of social support and psychosomatic symptoms among 14-16 year old adolescents (Aro, Hanninen, & Paronen, 1989), investigators reported a link between stressful life events, symptoms, and a lack of parental support. They found that adolescents who experienced negative life events and who reported a poor relationship with at least one parent had the highest levels of symptoms at the beginning of the study and the greatest increase in symptoms during follow-up.

Parental health may affect social support for adolescents. Hirsch and Reischl (1985) investigated the relationship among social networks, parental symptomatology, and self-esteem among high-risk and normal adolescents. When adolescent social networks were similar across groups, the children of depressed or arthritic parents facing stressful situations utilized peer support and parent-peer linkages but were more poorly adjusted than children of disorder-free parents who used the same network variables with resulting positive adjustment.

In an examination of data related to psychiatric symptoms in an adult population, Eaton (1978) reports that stressful life events are more likely to cause mental disorder when subjects have not experienced similar stressors before; but that social support received from members of the subject's household helps prevent mental disorder by buffering the effects of stress.

Investigators have considered parent and peer relationships significant influences on adolescents' school adjustment (Coleman, 1961; Steinberg & Silverberg, 1986). In two studies of the relative influence of parents and peers (Berndt, Miller, & Park, 1989) adolescents perceived that parents are far more influential than friends in influencing their attitudes, behavior, and achievement in school, and that the lack of influence by friends is due to adolescents' lack of interest in or opportunity for such influence. Berndt suggests that this is consistent with Everhart's (1983) contention that school is not a salient issue for many adolescents.

Great diversity exists in family structure that may impinge on the provision of support. In a study of single-parent families and social support (McLanahan, Wedemeyer, & Adelberg, 1981) investigators examined the structure of supportive networks for households led by divorced mothers. They hypothesize that different types of networks provide distinct kinds of support. Loose-knit networks (new friendships, and relationships with males by career oriented women) are supportive for women attempting to establish a new identity, while close-knit networks (with family of origin or with relationships with males for women identifying strongly with wife and mothering roles) provide support for women attempting to maintain their existing identities. This role orientation of divorced mothers, and thus their network structure, can change over time. In a meta-analysis of 114 clinical and empirical studies of stepfamilies (Ganong & Coleman, 1986) found that there is a widely shared appreciation for the influence of family functioning on stepchildren's adjustment. Visher and Visher (1983) have delineated

several structural differences in stepfamilies (such as parent-child bonds that predate the new couple's relationship, the presence of a non-custodial biological parent, children as members of two households) that impinge on family members' abilities to cope with stress and which themselves affect the creation of new stressors within the restructured family.

Provision of Support from Friends

Piaget (1932) has hypothesized that peer interaction is the key to social development in children. Sullivan (1953) has theorized that socializing among preadolescent children, which tends to occur in same-sex dyads and groups, contributes to the development of social cognition and facilitates the development of a sense of sharing and mutuality. Many studies have examined the importance of social support and social relationships that develop during adolescence. Studies of adolescent social networks have revealed a pattern of peer affiliation that changes in size, composition, and importance over time (Cairns, Perrin, & Cairns, 1985; Garbarino, Burston, Raber, Russel, & Crouter, 1978; Montemayor & Van Komen, 1985). Investigations of the role of the family during adolescence suggest that the social world of the adolescent expands to include peers and others outside the family, yet does not simply relocate from family to others (Blyth, Hill, & Thiel, 1982; Brown, Eicher, & Petrie, 1986; Hunter, 1985; Hunter & Youniss, 1982). Other studies have attempted to specify the nature of social support as perceived by adolescents. Furman and Buhrmester (1985) asked early adolescents to assess various qualities that constitute support. Parents were seen to provide alliance, affection, enhancement of self-worth, instrumental aid, and intimacy; peers were seen to provide the highest levels of companionship; while teachers were perceived to provide instrumental aid. A recent study (Fullerton & Ursano, 1994) reviewed the literature on pre-adolescent friendships in an attempt to clarify the relationship between social support at this stage and subsequent adult social support; nothing conclusive was drawn from the review, although

studies of pre-adolescent best- friendships suggest a possible connection to later, adult social relationships.

The relationship between stressful events and adolescent adjustment has received some attention in the social support literature. Aro, Haninen, and Paronen (1989) examined the role of family, friends, and confidants in mediating the impact of adverse events on adolescents. Results suggest that adolescents who lack parental or peer support are at greater risk for psychosomatic symptoms during stressful life events. Cauce (1986) explored the relationship between friendship, social network variables, and social competence in a sample of lower socioeconomic adolescents. She reports that perceived emotional support and the number of reciprocated best friends contributed independently to school competence, peer competence, and perceived self-competence measures. Cauce, Felner, and Primavera (1982) examined the structure of social support and its relationship to adjustment for lower socioeconomic, inner-city adolescents. They discovered three support dimensions--family, formal, and informal--that varied in perceived helpfulness as a function of age, gender, and ethnic background. In a study of high school seniors (Compas, Slavin, Wagner, & Vannatta, 1986) it was found that satisfaction with social support did not modify the association between negative life events and psychological symptoms.

Felner, Aber, Primavera, and Cauce (1985) examined the role of social environmental mediators in the adaptation and vulnerability of high-risk adolescents. They report that different dimensions of the social environment are differentially salient as mediators of adaptation. Gad and Johnson (1980) examined the relationship between desirable and undesirable life events and outcome variables of health status and adjustment among subjects varying in socioeconomic status. Results suggest that low socioeconomic status adolescents experience higher levels of negative life change and that these are related to outcome variables, although these relationships did not vary as a

function of social support. Hansell (1985) investigated the association between the structure of adolescent friendship networks and responses to distress among college-preparatory students. He found that some dimensions of network structure were associated with reduced distress while others were associated with increased distress. Hotelling, Atwell, and Linsky (1978) examined how stressful life events relate to illness in a nonclinical sample of adolescents. They report that social support from parents appears to mitigate the effects of life event stressors on illness, and that undesirable or ambiguous life events have greater impact on illness than do desirable events.

The concept of friendship may overlap with peer relationships, but they are not synonymous; for adolescents, the number of friends and popularity with peers are not correlated (Feltham, Doyle, Schwartzman, Serbin, & Ledingham, 1985). Adelman and associates have explored the concept of friendship (Adelman, Parks, & Albrecht, 1987) and have distinguished five characteristics (voluntariness, equality of status, assistance, sharing of activity, and emotional support). The element of choice of one's friends (voluntariness) distinguishes friendships from other types of relationships (family, extended kin networks, work relationships); Adelman asserts that, with the exception of marriage, no other close relationship has such a strong element of voluntariness. Adelman affirms that the second element of friendships (having a mutual sense of equality in social status between friends) is a feature of close friendships that distinguishes them from less developed relationships that rely on other factors such as propinquity. The third feature (assistance) involves the sense of caring about the other person and, in American culture at least, is less strongly linked to caring for another through an expectation of tangible aid. The fourth element (activity sharing) is common to many types of social relationships (such as families sharing leisure activities or participating in work-related events) but shared activities among friends are more likely to lack a sense of obligation common to family or work activities and to center more on the intrinsic value of the

activity itself. Finally, friendships are described by Adelman as providing the primary source of emotional support for unmarried persons, for adolescents experiencing stresses, for those who find their spouse unsupportive, and for the elderly who lack access to a kinship network. Beyond this, friendships provide an emotional support because, unlike dense connections among family members, friendships provide emotional release that is more likely to be kept confidential. Finally, the emotional connection between friends differs from family connections insofar as friendships can be more easily terminated when emotional issues become too disruptive.

Friendships are not static. Adelman and associates (1987) have also referred to the multiplicity of ways that friendships develop (Adelman et al., 1987). Each of these has implications for the social support process. Friendships tend to develop as intimacy and emotional attachment increases, as the extent and variety of interactions increases, as the degree of interdependence and contingency between friends increases, as their communication becomes increasingly specialized, as cognitive uncertainty about oneself or the other person decreases, and as the social networks of each party become increasingly intertwined.

La Gaipa (1979) has discussed the concept of adolescent friendships from the perspective of developmental tasks, particularly that of intimacy-competence, in which the adolescent develops the capacity for forming close relationships with others outside the family. He proposes that there are age-related changes in the meaning and structure of friendships after childhood. Younger children consider playing and sharing as the most important qualities of friends; by pre-adolescence, authenticity and intimacy of disclosure begin to emerge as important qualities. Between ages 13 and 16, intimacy becomes increasingly significant, although the meaning of friendship--the factors adolescents perceive as important--generally has stabilized by early adolescence. La Gaipa suggests that changes between early and later adolescents are explained by the increasing

proportion of adolescents who, over time, are able to engage in formal operational thinking (Piaget, 1950) that permits the individual to engage in reflective thought, self analysis, and mutuality in relationships. This is played out in the adolescent pursuit of recognition, approval, and a sense of belonging to a peer group. Parallel to this process, there is also a need for more intimate relationships that is usually satisfied in dyadic friendships. La Gaipa asserts that needs satisfied by acceptance in a peer group do not depend on forming close friendships and that, especially for adolescent males, peer group acceptance and status can supersede the need for close friendships.

The context in which supportive networks exist is relevant in discussing support for children and adolescents. An examination of the social ecology of preadolescents (Garbarino, Burston, Raber, Russell, & Crouter, 1978) reports differences in social networks by type of environment (rural, urban, or suburban) and socioeconomic status. For instance, children from rural environments list more people as part of their network than do either urban or suburban children. Urban children report less interconnectedness among network members (in which network members know each other) than do suburban or rural children, although urban children list significantly more contact with adults in their social network than do other children. Preadolescents from low socioeconomic groups report less congruence between parent and child and a greater supportive role by institutional representatives such as teachers and social workers.

The changing importance of peer group affiliation has been discussed in relationship to younger and older adolescents (Brown, Eicher, & Petrie, 1986). In childhood, dyadic and small-group relationships are normative; by early adolescence, larger collectives related to school and neighborhood emerge as significant components of social processes, whose importance tends to decline over time. Young adolescents tend to be attracted to membership in such crowds for the provision of emotional and instrumental support, a context in which to develop friendships, and because peer crowds facilitate

social interaction. By later adolescence, the conformity demands of the crowd are seen as less desirable and are replaced by friendship networks that do not depend on crowd affiliation. Brown argues that the role of peer group alliances emerge as emotional dependence on the family begins to loosen; the peer group provides a context for socializing and receiving support independent of the family. As a more autonomous sense of identity develops, peer groups become less important and, in fact their demand for conformity begins to interfere with the individual's sense of autonomy. Dyadic relationships, particularly related to sexual identity and expression, and the individual's constructed friendship network fit better the emerging sense of being an independent young adult.

A longitudinal study of students in intermediate, junior high school, and senior high school with a one-year follow-up examined the patterns of friendship selection by youth (Epstein, 1983) report, in part, as students get older they tend to select friends from wider social circles and involve more opposite sex members in their networks than do younger students. Friendship choices tend to be based on similar social class, race, gender, academic achievement, and personal attributes, although schools that provide greater opportunities for student interaction with their peers tend to create an enriched social environment from which a broader spectrum of friendships are drawn.

Support from family and friends is related to psychological adjustment. Low peer popularity has been related to children who are aggressive and disruptive, and those who are socially withdrawn or isolated, and poor peer relations predict behavior and academic problems in adolescence and mental health problems in adulthood (Feltham et al, 1985). Hansell (1985) has found that the structure of adolescent friendship networks (including such elements as reciprocated friendships, status choices, and density of networks) is related to indices of psychological, physical, and behavioral distress.

Sabatelli and Anderson (1991) report that the lack of peer support has been found to be related to increased levels of depression but was unrelated to adolescents' feelings of anxiety. They support the theory that patterns of interaction with peers change over time, leading to an increasing dependency on the peer group during early and middle adolescence, and changing in late adolescence to increasing resistance to peer pressure and a greater capacity for autonomous behavior. During adolescence, questions of identity, belonging, self-esteem, and the future are explored in the social worlds of family and friends. Sabatelli states that the influence of peers tends to be situation-specific, being greater regarding everyday living, use of leisure time, and fashion, yet less influential than parents in such areas as career and educational plans. Parents and peers are viewed as complementary, not mutually exclusive, parts of adolescents' social networks. Premature severing or a significant weakening of parent-adolescent ties eliminates an important source of support and intensifies the influence of the peer culture, even as excessively close family relationships hinder development that can occur with peers.

Adolescents and Support

Some researchers have focused their investigations on the various substages of adolescence. Clark-Lempers, Lempers, and Ho (1991) examined the perceptions of adolescent relationships with significant others for early (ages 11-13), middle (ages 14-16), and late (ages 17-19) adolescents. Respondents ($N = 1,110$) were asked to assess their relationships with mothers, fathers, best same-sex friend, most important sibling, and most important teacher along nine attributes (admiration, affection, companionship, conflict, instrumental aid, intimacy, nurturance, reliable assistance, and satisfaction with the relationship). Teachers were not perceived as important across all groups, although responses were highest across relationships for younger respondents and declined with

age, suggesting a possible decline in the importance of these relationships for older adolescents.

In a study of attachment theory, perceived social support by late adolescents has been examined (Blain, Thompson, & Whiffen, 1993) using undergraduate college students ($N = 216$). Students reporting secure attachment (based on positive models of self and others) also tended to report higher levels of perceived social support from both parents and friends as well as attachment to friends; respondents reporting insecure attachment was related to lower levels of perceived social support and attachment to friends, particularly for males.

Early adolescence has been called a time of particular vulnerability during which biological, psychological, and cognitive changes occur and in which social relationships to family, friends, and others are reappraised (Hamburg & Takanishi, 1989). The social world of the early adolescent changes in several ways from the world of the child. Higgins and Parsons (1983) have discussed at length the context for socialization, particularly junior and senior high school, that presents a broader variety of opportunities for social contact than elementary school. For instance, elementary schools tend to have stable class rosters and fewer teachers as opposed to the changing classes, multiple teachers, and larger student population drawn from a greater geographic area typical of junior and senior high school; social activities increase as social positions and roles become available in both school and peer groups that were not available in earlier years.

Serafica and Blyth (1985) summarized six decades of research on friendship and peer groups during early adolescence. The earliest studies on friendship during early adolescence emerged out of research into the ways children's social attachments develop with increased age; they reported that the choice of friends is related to chronological age, physical maturity, and mental ability. During the 1940s and 1950s the stability of adolescent friendships was studied, particularly the question of whether or not adolescence

is a time of storm and stress; it was found that, with increased age, stability in friendship also increased. Anxiety about friendship was seen to increase starting in early adolescence, peaking in middle and declining in late adolescence. From the 1960s through the 1980s, research focused on adolescent peer group formation and structure and the ways they varied as a function of sex and phase of adolescent development; during the 1960s the first sequential transformations in friendship patterns were studied and sex differences in friendships between adolescent males and females were delineated. The 1970s and 1980s showed increased investigation of the broader social world of the adolescent that distinguished among the age composition of social networks, friendships, peer groups and clusters, and social mapping. Younger adolescents were found to list same-sex peers as most significant in their social networks as opposed to opposite-sex peers for later adolescents.

Family structure may influence coping styles during early adolescence. A study of junior highs school students ($N = 203$) distinguished between peer and family role strain and coping strategies for male and female adolescents (Bird & Harris, 1990); they found that males experience less family role strain than do females, and that they utilize ventilation more often and social support less often as coping strategies; and that adolescents in single-parent homes tend to utilize family support significantly less often than adolescents from two-parent homes. Social support in single-parent families has also been examined (Friedmann & Andrews, 1990) in relation to the adjustment of children. Single parents reported higher financial stress than parents from two-parent families, but no differences were found between children cared for by supportive adults in one or two-parent families. Another study (DeMaris & Greif, 1992) examined parent-child relationship problems in single father households ($N = 912$) with various family structures (number of children, gender distribution of children, age distribution, and age-spacing of children). Families with preadolescent girls exclusively reported fewer parent-child

conflicts than other structures; social support, paternal involvement in child care, lack of marital conflict, and the method of obtaining custody were significant predictors of father-child conflict.

The relationship between parenting styles, early adolescent males' self-restraint, and peer relationships has also been examined (Feldman & Wentzel, 1990); parental focus on their children and family social support were predictors of positive impact on peers.

A study of adolescent males and females (Burke & Weir, 1978) showed that females tend to report receiving significantly greater social support from peers even as they report greater life stress than males do. A study of African-American early adolescents (Coates, 1987) supports the notion of gender differences in adolescents' social networks. Males tend to have more intimate friends than females and are much more likely to indicate feeling close to male peers; females are more likely to describe their networks as consisting of kin, as being smaller and more intimate than males', and containing members of both genders. Fischer, Sollie, and Morrow (1986) conducted a short term longitudinal study of male and female 10th grade students' social networks and conclude that early social competence is related to later relationship quality. Females were more sensitive to negative, and males to positive, relationship qualities; changes in the social network (adding or dropping friends and acquaintances) tend to occur for females when negative experiences disrupt intimacy while, for males, changes occur when friends fail to provide positive experiences. In an examination of peer group and friendship structures for in-school and out-of-school adolescents (Montemayor & Van Komen, 1985), it was reported that groups observed outside of school tend to become smaller and more heterosexual in structure while those in school tend to remain larger and same-sex structured.

An examination of the structure of the social network of early adolescents (Blyth, Hill, & Thiel, 1982) reveals that 7th to 10th grade students tend to list more peers than

adults as significant in their lives; more same-sex peers were seen as significant, although the importance of opposite-sex peers increases with grade level. Adults, however, are not replaced by peer relationships; the mix of adults and peers was found to be relatively stable over all grades. Another study of the same age group (Blyth & Foster-Clark, 1987) examined gender differences in social networks. Across ten different types of family and non-family relationships (including relationships with fathers, mothers, siblings, same-sex and opposite-sex friends, extended-family adult males and females, non-kin adult males and females, and extended youth) with male and female adolescents tend to rank intimacy somewhat differently. Females rank same-sex friends as most significant, followed by their relationship with mother, siblings, and fathers; opposite-sex friends were ranked sixth and extended non-friend peers ranked eighth. Males ranked mothers as most significant, followed by fathers, and same-sex friends; opposite-sex friends were ranked sixth and extended non-friend peers ranked ninth. A recent study (Fuilligni & Eccles, 1993) considers the relationship between alienation from parents and increased peer orientation. They examined the relationship between early adolescents' perceptions of parent-child relationships and their orientation toward their peers and found that adolescents who perceived their parents as restrictive and unwilling to share power with them were more extreme in their peer orientation than those whose parents were not; those adolescents who perceived few opportunities or who saw no increase in opportunities to be involved in decision-making at home also reported a more extreme peer orientation and greater propensity for advice-seeking with peers.

Almost all studies of adolescents and social networks have focused on the positive characteristics of social embeddedness. Moore and Schultz (1983) examined the commonly reported but rarely examined phenomenon of loneliness in adolescence. They found that lonely adolescents are not only isolated but are less likely to take social risks. Adolescents associate loneliness with an external locus of control. It is related to

increased anxiety, depression, self-consciousness, and lower perceptions of attractiveness, likeability, happiness, and life satisfaction. A study of life stressors and social resources among adolescents (Daniels & Moos, 1990) reported that depressed adolescents reported the presence of fewer social resources (such as parents, siblings, extended family, school, and friends) and more acute and chronic stressors.

A study of the structure of early adolescents' social networks (Cairns, Perrin, & Cairns, 1985) reinforces the finding that early adolescent social clusters (the peer groups to which adolescents belong) are mostly same-sex groupings. The social cluster tends to have central significance for the early adolescent; best friends are most often other members of their own social cluster and these choices are likely to be reciprocated. Early adolescents tend to view their social world-- to create social maps-- in terms of such clusters; subjective appraisals of the membership of one's own and other social clusters are validated by their peers and outside observers. the intense need for conformity to the cluster in early adolescence was noted by Cairns in terms of the interaction with other members of the social cluster as well as behaviors such as returning consent forms as a unit or dropping out of school as a cluster. A study of African-American early adolescents (Cauce, 1986) has shown a positive relationship between social support variables (perceived emotional support received from friends and the number of reciprocated best friends) and increased social competence (school competence, perceived self-competence, and competence with peers).

Coping with Stress

Hirsch (1985) has used two case studies to illustrate contrasting strategies by which adolescents exposed to stressors can cope successfully; one entails the use of a strong peer social network, the other involves becoming satisfactorily engaged in school-related activities. A perceived weakness of both strategies was their lack of

generalizability of adaptive skills and strengths to other social settings, suggesting to the author the need to build a supportive personal network that transcends any given social context.

A recent study of coping strategies for adolescents (Halstead, Johnson, & Cunningham, 1993) attempted to confirm factors from a coping checklist first used with adults that was modified for adolescents; they report four coping factors used by adolescents: being problem-focused, seeking social support, wishful thinking, and avoidance; adolescent males tended to utilize avoidance while females tended to seek social support and employ wishful thinking. African-American adolescents tended to use more coping strategies than did Caucasian adolescents.

The structure of social support takes on added significance for special populations. An earlier study of social support with lower socioeconomic young children (Sandler, 1980) reported that the presence of older siblings and two-parents at home diminished the effects of stress. A study examining social support variables for adolescents from high-stress, lower socioeconomic, inner-city backgrounds (Cauce, Felner, & Primavera, 1982) revealed that different sources of support varied in helpfulness across age, gender, and ethnic groups. African-American youth perceived family support to be significantly more helpful than did Caucasian or Hispanic youth; younger males rated families as more helpful than did older male adolescents, as opposed to older adolescent females who rated families more helpful than did younger females. Formal support (from counselors, teachers, and clergy) was seen to be more helpful for older adolescents than for younger, for African-American males than for other groups, and generally, was more helpful for males than for females. Informal support (from friends and other adults) was viewed as more helpful by females than males. Hispanic males reported uniformly low levels of support across sources. Cauce and her associates also related types of support to school performance and found that sometimes a negative relationship exists between social

support and adjustment; for instance, adolescents with higher levels of support from friends showed significantly poorer academic adjustment. Cauce theorized that the peer group may exert greater pressure to conform to negative attitudes and behavior related to school performance.

Krohn and associates (Krohn, 1986; Krohn, Massey, & Zielinski, 1988) have theorized that the structure of adolescents' social networks is related to delinquency. He asserts that characteristics of the network, particularly network density (the extent to which all members of a social network relate directly to one another) and network multiplexity (the number of different role relationships that any two people in a network have with one another), act to constrain behavior. The greater the degree of connection (multiplexity or density) among network members, the greater the risk that behavior that is perceived to be deviant or threatening to the network in one context will be seen as threatening in other contexts; multiplex networks are more likely to impose constraints on members' behavior. Krohn suggests that adolescents from lower socioeconomic groups are less likely to have access to or participate in the kinds of social activities that middle or upper socioeconomic adolescents can; this can lead to friendship networks that are less multiplex for the poor than for others, and which in turn can limit the effectiveness of the social network to constrain deviant behavior, and thus, why deviant behavior is more prevalent among poorer groups than others. In a limited test of multiplexity (Krohn et al, 1988), cigarette smoking among adolescents was found to be lower for those adolescents who were involved in formal, focused contexts with parents or with parents and friends; it was also found to be lower for adolescents whose friends were known to their parents.

Adolescents in Transition

Several studies have explored the psychological effects of institutional relocation. They include populations as varied as retarded children in residential care (German &

Maisto, 1982), deaf adolescents in transition to a residential school (Lytle, Feinstein, & Jonas, 1987), the transition of students to college (Campbell & Watkins, 1988; Hays & Oxley, 1986) and the elderly relocating from one institution to another (Horowitz & Schulz, 1984; Wells & MacDonald, 1981). Support from family and others has generally been seen as positively correlated to successful adjustment.

The consequences of life changes on adolescents have been examined in numerous research studies. Gad and Johnson (1980) have explored the relationship between stress and social support for black and white adolescents and report that higher levels of negative life changes were found among lower socioeconomic group adolescents, regardless of race, and that life changes were related to perceived health and personal adjustment, regardless of social support. Vaux and Ruggiero (1983) examined life changes for adolescents in relation to self-reports of involvement in delinquent behavior and found that the number of life changes, along with lower socioeconomic status and age, were related to increased incidents of delinquency.

Felner and associates (Felner, Ginter, & Primavera, 1982; Felner & Primavera, 1982; Felner, Primavera, & Cauce, 1981) have explored the transition of normal adolescents to high school and have found that increasing the level of social support available to transitioning students as well as reducing the complexity and flux in the new school setting was positively related to attendance, grade point average, and student self-concept, and that multiple school transfers (as opposed to a single school transfer) were negatively related to academic adjustment. A recent study (Seidman, Allen, Aber, Mitchell, & Feinman, 1994) examined the effects of the transition from elementary to junior high school for early adolescents living in poverty. Domains examined included the self-system, perceived school contexts and peer social contexts for African-American ($N = 161$), Hispanic ($N = 273$), and Caucasian ($N = 146$) subjects. The school transition was associated with declines in self-esteem, class preparation, grade point average, social

support, and extracurricular involvement, and an increase in perceived hassles with the school across all groups.

A study of patients involuntarily committed to psychiatric hospitalization (Splane, Monahan, Prestholt, & Friedlander, 1982) included adolescent subjects; when compared to a control group of medical patients, the committed patients reported significantly worse relationships with parents and siblings and reported having fewer friends in their social network. Stevens (1989) has identified six coping strategies of adolescents hospitalized for surgery, including: distancing (using distracting thoughts when stressed), inaction (lying still or sleeping), self-control (controlling feelings or withholding disclosure of feelings to others), seeking social support, active coping (physical or verbal activity to manage a stressful event), and situational control (taking action to maintain control of a situation); one of the most frequently used coping mechanisms was seeking social support (54 % sought emotional support from a parent, 8% from friends, and 38% from the nursing staff).

Adolescents in Residential Placement

An examination of the literature from the 1980s concerning the precipitating factors leading to the residential placement of disturbed children and adolescents (Cates, 1991) concluded that, for young children, residential placement is more often utilized by children from dysfunctional families and is seen as a treatment of last resort; they report that adolescent males referred for residential placement tend to be described as immature, withdrawn, delinquent, and hyperactive, whereas adolescent females tend to be described as anxious, delinquent, cruel, aggressive, and hyperactive.

Family support has been related to positive adjustment to residential treatment by several researchers (Coates, 1981; Mahoney, 1981; Anglin, 1985). Some practitioners have explored dimensions of family involvement in planning for residential placement for

adolescents (Farley, 1985) and in developing stages of involvement of family members in the residential treatment of adolescents (Jones, 1985). Jones proposes that families can be effective in the treatment process from assessment, to building mechanisms in the family supportive of adaptive behavior in the adolescent during treatment, to the reintegration of the adolescent into the family at the end of treatment. The role of parents in the residential treatment of male children (ages 4 to 14) in a psychiatric inpatient program has been examined (LaBarbera, Martin, & Dozier, 1982); they suggest that parental attitudes and emotional responses are important determinants of the success of residential treatment. For instance, parental expressions of relief at admission to treatment were found to be negatively associated with progress during treatment; parental unwillingness to relinquish control to clinicians was related to poor treatment outcome, as were separation difficulties exhibited by parents.

Early studies of troubled youth in residential care have explored facets of family support. In a study of emotionally disturbed youth using a retrospective design (Taylor & Alpert, 1973), post-treatment adaptation was associated with the perceived support given by family and with parental support prior to and during treatment. A study of a small sample ($N = 18$) of parents of delinquents in residential treatment focused on parental training in behavioral techniques (Doherty, 1975); a majority of subjects reported a decrease in delinquent behavior after training. Oxley (1977) has studied the relationship between parental involvement during treatment of behaviorally disturbed adolescents and reported a positive association with adjustment four years after treatment.

McConkey-Radetzki (1987) attempted to distinguish various developmental stages in a family therapy program for children and adolescents (ages 8 to 18 years) in residential treatment for issues such as delinquency and aggression; she describes seven stages (isolation, integration, symmetry, external consultation, exclusion, supervision of

supervision, and consolidation) that develop over the course of work with residents' families.

Low and lower middle class adolescents' perceptions of the family have been examined as they relate to adaptation to residential schooling (Shulman & Prechter, 1989). Shulman and Prechter locate their study within the process of adolescent individuation from the family of origin, examining what has been termed by Moos (1976) as "family climate" (consisting of relationships: commitment toward other family members and the open expression of feelings; personal growth: the extent to which members are assertive, self-sufficient, and able to make their own decisions; and system maintenance: by which organization, rules, and structure in the family are emphasized). They administered the Family Environment Scale (Moos, 1976) six weeks after the beginning of the school year and had teachers measure outcomes using a classroom behavior inventory. Among their findings, they reported that no differences in the perception of family climate were found to exist between adolescents in residential school away from home and those nonresidential students still living at home. One explanation given is that young adolescents, although out of the home, maintain emotional involvement with their families and are slow to change their perceptions of the family. In the nonresidential group, emphasis on family structure and control tended to interfere with expressions of autonomy in outcome measures while family encouragement of adolescent assertiveness and self-sufficiency contributed to feelings of competence; in the residential school group the results were reversed. The authors suggest that for students still at home, parental control tends to evoke opposition, while for the adolescent no longer at home, it may serve as a model for self-organization and individual competence; a preoccupation with family concerns by residential students may impede their sense of separateness and interfere with their attaining competence. Shulman and Prechter also consider the role of the peer group in a residential school setting; the residential setting provides a peer group that differs

from voluntary peer associations at home insofar as it is not pre-selected by the adolescent. Nevertheless, Shulman and Prechter theorize that the importance of peers in the process of disengaging from the family of origin is heightened; the reliance on peers for adolescents living away from home is reinforced as the role of the family in the adolescent's socialization is diminished.

Peer support of troubled youth in residential treatment has been examined in past research. Utilizing a longitudinal design, a large sample ($N = 480$) of convicted adolescents committed to state training schools was compared to non-committed delinquent youth (Coates, Miller, & Ohlin, 1978). In the year following their release, those youth who committed subsequent illegal acts were found to be influenced by a negative peer culture. An investigation into the social cognitive skills and behavioral adjustment of delinquent adolescents in a residential treatment facility (Hains & Herrman, 1989) tested whether delinquent adolescents are deficient in social cognitive skills such as problem-solving, self-control, internal locus of control, and appropriate attributions. They found support for their contention that successful adjustment to the institution (higher functioning and behavioral adjustment) was related to higher problem-solving ability but not to other social cognitive skills, and that non-aggressive adolescents are more likely to adjust to residential treatment.

Young (1981) investigated social support networks using a very small sample ($N = 14$) of adolescents institutionalized in two mental health facilities, utilizing structured interviews of patients and staff, in an attempt to delineate the structure and functions of informal peer support groups. He identified support groups within and outside of the institution with both an orientation to action (participating in an activity together) and an orientation to dialogue (discussing problems with others and, as a response, fulfilling requests for help); action-oriented support tended to be diversionary and unreflective; dialogue-oriented support tended to work to alleviate problems and arbitrate disputes.

Connolly (1987) conducted a study to determine if social status could be reliably assessed in a peer group of adolescents in a residential treatment program for psychiatric disturbances, if it could be predicted from measures of social activity prior to admission, and if it corresponded to observed patterns of social behavior during treatment. Collecting data at the time of admission and follow-up data during each of the first six weeks and final six weeks of treatment, she found that parent ratings of their child's social competence and problem behaviors significantly predicted acceptance and social preference in the clinical milieu; peer ratings of social acceptance or rejection were found to remain stable over the length of the study; and, those subjects who initially presented with more severe behavior problems and fewer social competencies were more likely to have difficult peer social relationships during treatment.

Feldman, Caplinger, and Wodarski (1983) investigated the peer networks of 280 antisocial and adjusted youth in a non-residential community program involving a variety of education and recreational activities; subjects were randomly assigned to three groups: mixed antisocial and pro-social youth, antisocial youth only, and pro-social youth only. They found that antisocial youth in the mixed groups reported significant decreases in measures of antisocial behavior. Another investigation of the relationship of the peer group and the presence of psychosocial problems in adolescents (Downs & Rose, 1991) examined a community sample ($N = 127$) and matched controls ($N = 114$); the least involved in school activities were most often labeled negatively by other adolescents and tended to have the most positive attitudes toward alcohol and drug use, the lowest levels of perceived harm from using alcohol or drugs, and the highest levels of delinquency, depression, and use of drugs and alcohol.

An examination of the relationship between social support, personality factors, and aggression in 14-16 year old adolescents in a community sample (Kashini & Shepperd, 1990) found that those with lower social support and those exhibiting forceful personality

characteristics were more likely to report using physical and verbal aggression to resolve conflict. Cumsille and Epstein (1994) examined depressive symptoms in an outpatient clinic sample of adolescents ($N = 93$) and its relationship to family cohesion, family adaptability, and social support from family and friends. They found that family cohesion and family social support had an inverse relationship to depression, that social support from friends did not buffer depressive symptoms, and that family characteristics were more strongly correlated to depression for male adolescents than for females. A study utilizing a school sample ($N = 505$) of 11th and 12th grade students examined the role of perceived social support from family and peers for adolescents experiencing elevated levels of stress. Perceived family support seemed to provide a buffer against depression and delinquent behavior; high perceived peer support was related to lower levels of depression but higher reported delinquency.

Beyond support from family and peers, elements of the broader social network of troubled adolescents have been examined in several studies. In an early investigation of the relationship between community support and delinquent behavior (Berger, Crowley, Gold, & Gray, 1975), adolescents were randomly assigned by juvenile court to control groups and groups that were linked to adult volunteers in order to involve them in pro-social activities; no differences were found between those who received treatment and those who did not on reports of subsequent delinquent behavior. A study of community support for delinquent youth in group homes has reported positive associations between community training and education of adolescents with subsequent higher rates of employment (Cross-Drew, 1984). In two studies of the "Teaching-Family" model of community intervention in group homes, no association was found between intervention by advocates trained to help youth develop community support systems and subsequent rates of criminal behavior (Jones, Weinrott, & Howard, 1981); in the second study (Kirigin, Braukmann, Atwater, & Wolf, 1982) lower rates of criminal behavior were

reported during treatment but were not maintained after one year. A treatment modality for emotionally disturbed adolescents in residential care based on a "generic team" approach has been described in a preliminary report by Krueger and associates who conclude that the use of an interdisciplinary team that balances professional status among team members provides gains in resource allocation and cost benefits for child and youth care (Krueger, Fox, Friedman, & Sampson, 1987).

An examination of outcome data from past participants ($N = 306$) in a residential treatment program for adolescents with behavior problems (Force, Burdsal, & Klingsporn, 1988) found that socialized coping two years after leaving treatment was positively correlated with family involvement and was negatively correlated with social irresponsibility and incarceration. A recent study of cognitive and behavioral therapy with adolescent males in residential treatment (Valliant, 1993) evaluated the effectiveness of daily behavioral therapy that was combined with weekly cognitive-behavioral therapy, with pretest, three and sixth month measurements (of self-esteem, anxiety, and hostility), and one-year follow-up; he reports a significant decrease in verbal hostility and an increase in self-esteem at six months, although at one year follow-up no lasting gains are reported. Valliant suggests that this reinforces the popular view that, outside of a structured environment, treatment gains may be compromised by an inability to subjectively discriminate acceptable from unacceptable behavior.

The relationship between residential instability among adolescents (that is, the number of times they have moved between care-giving residences) and psychopathology has been investigated by Mundy and associates (Mundy, Robertson, Greenblatt, & Robertson, 1989). A sample of inpatient psychiatric adolescents found that 30% had experienced a high rate of residential instability (defined as from 5 to 25 moves). They report that residential instability was related to caregiver neglect, caregiver abuse, parental separation, multiple hospitalizations, low IQ, poor impulse control, and antisocial

behavior. Even simple household moves can affect adolescents; an Israeli sample of pre-adolescents and adolescents whose families moved to a new home were examined to delineate factors contributing to the stressfulness of a household move (Raviv, Keinan, Abazon, & Raviv, 1990). Among the factors identified were several elements of social support, including active participation support, family support, and older siblings support; adolescents moving to a new city reported higher stress than those moving within the same municipality.

As part of the effort to evaluate the validity and reliability of the Social Support Appraisals Scale (SSA) Vaux et al. (1986) reported on data from five student and five community samples; the student samples included three pools of undergraduate students under 23 years of age, a sample of African-American undergraduates, and a sample of mature female students with a mean age of 37 years (Vaux et al., 1986). The community samples included three groups of adults, one group of fathers, and a group of adolescents (12-17 years old) in a normal population. The adolescent sample was selected from among the siblings of one of the undergraduate study samples and was surveyed by mail. No other reports of adolescent samples employing the SSA have been published; no study utilizing this instrument with a sample comparable to that investigated in the current study has been reported in the literature. The Social Support Behaviors Scale (SSB) (Vaux et al., 1987) has, likewise, not been used previously with a sample comparable to that being examined in this study.

Conclusions

The purpose of this study is, in part, to help map the structure of perceived social support, extending prior research to a neglected special population, adolescent males in transition to residential care. Further, it is intended to provide at least preliminary data on the potential relationship between perceived social support and early adjustment to

residential institutionalization. As such, it is part of a larger, ongoing effort by investigators to test whether the social support construct explains specific observed phenomena. Although necessarily limited in size, the population examined in this study includes middle and late adolescents, representatives of African-American, Caucasian, and Hispanic cultures, and lower socioeconomic groups, thus contributing to the growing literature on these groups.

CHAPTER III

METHOD

Important differences exist between earlier studies of adolescent social support and this investigation. The primary difference centers on the population being studied. The subjects in this study were drawn from a pool of male adolescents in transition to residential care. As it already has been noted, residential care differs from a random sample of adolescents from the general population, from inpatient or outpatient psychiatric adolescent samples, and from populations of incarcerated or convicted adolescent offenders. It is also distinct from residential treatment. Research on social support appraisals and behaviors as perceived by male adolescents in transition to residential care has not been previously conducted.

A second distinction between this study and prior investigations of social support lies in the data that it generated, notably the specificity of facets of social support that are examined. As discussed at some length in the previous chapters, a significant limitation of early social support research appears to be its lack of specificity of the nature, source, strength, and valence of the construct. The current study was devised to add to a growing literature seeking to map the construct with specific populations and under specific circumstances with greater precision.

Hypotheses

This study was designed to test three null hypotheses related to subjective appraisals of social support by a select population. Three null hypotheses were tested:

1. There is no relationship between subjective appraisals of social

support and the outcome measures.

2. There is no relationship between a specific mode of perceived supportive behavior and the predicted direction of the outcome measures.

3. That there is no relationship between the mode or source of social support and the phenomenon of premature departure from residential care.

To reject the first null hypothesis, a positive relationship should be shown to exist between high scores on the Social Support Appraisals (SSA) Scale and the outcome measures (a high score on the AML, and low delinquency and class absence counts). To reject the second null hypothesis, the five modes of supportive behavior measured by the Social Support Behaviors (SSB) Scale (emotional support, socializing support, practical assistance, financial assistance, and advice and guidance) should be positively related to the outcome measures of adjustment to residential care (high AML score and low delinquency and class absences). To reject the third null hypothesis, social support appraisals and behaviors, as measured by low SSA and SSB scores, should be positively related to those who depart residential care before three or six month follow-up measurements.

Subjects and Settings

The Mercy Home for Boys is structured on a "therapeutic community" model, in which an attempt is made to create a psychologically safe environment in order to facilitate change. Its salient feature is the residential milieu around which all activities in the residential facility revolve. The milieu includes therapists, social workers, child care workers, support staff, and adolescents in residence who interact in an environment structured to provide support for each resident and to adapt the milieu experience to address individual needs (Cormack, 1988). Residents attend school outside the residential facility and may have outside employment, but live, eat, recreate, receive tutoring, attend

individual and group therapy, and participate in milieu meetings within the structured environment. Individual care is organized around a formal program plan for each resident which is determined after testing and interviewing at the time of application, and which is evaluated and, if necessary, modified at three month intervals during residency.

Typically, adolescents are referred for placement in residential care because of long- term behavioral problems. The applicant pool includes some adolescents who have previously been in foster care, some who have been attempting to live independently, and the majority who come from living with parents or relatives. The home environment they leave typically can be characterized by poverty, alcohol or drug use by family members, and an environment that lacks adequate nurturing or consistent limits. Applicants may have some history of affiliation with street gangs. Almost all are in need of academic remediation. They present at the time of application as angry or depressed after a recent period marked by increasing defiance of authority in school or at home. Clinical descriptors of applicants vary a great deal. They include: anxiety, depression, avoidance, defensiveness, dependency, with low self-esteem, oppositionality, emotional volatility, a history of being alcohol or drug dependent, dysthymia, borderline, and narcissistic characteristics. It should be noted that those still active in gangs or who are not amenable to initial treatment in a chemical dependency treatment program are not considered to be suitable candidates for residential care. All candidates are informed that residency is entirely voluntary; if a candidate does not express a desire to enter residential care and to conform himself to the milieu, or if residency is desired by parents or guardians but is not desired by the applicant, he will not be accepted.

Within the residential facility there are two residential programs which are related to this study, the Life Skills Program (LSP) and the Transitional Living Program (TLP). Both attempt to create an environment with clear expectations, rules, and consequences.

School attendance is required in both programs and great care is exercised in matching the academic environment with the needs and abilities of individual residents. As it relates to a resident's program plan, part-time employment is also required.

The Life Skills Program (LSP) is the more intensive milieu of the two programs, and tends to attract younger (generally 14-16 years old) adolescents who require greater structure and more intense supervision. LSP focuses on the mastery of basic life skills through exposure to a supportive environment, the reinforcement of adaptive and prosocial behavior, and a stepwise progression through three clearly defined stages of the program, leading from close supervision and few privileges to increasing autonomy and more privileges. The LSP milieu experience includes both formal and informal elements. Formal elements include daily meetings with an assigned child care worker who acts as the child's advocate, daily milieu meetings with all staff and program residents, formal study and tutoring time each day, and individual therapy which occurs an average of twice per week. Family therapy is utilized for some residents.

Informal elements of the LSP milieu include interaction with staff and other residents, sharing in maintaining the physical environment of the milieu through assigned chores, the monitoring of behavior in leisure time, and the monitoring of family, school, and job-related issues. Every three months a formal staffing is conducted to update or modify each resident's program plan and goals. Residents remain in LSP for an average of eight to eighteen months; once they have completed all stages of the Life Skills program they either return to their family or are eligible to move to the Transitional Living Program (TLP).

The Transitional Living Program (TLP) is a less intense milieu experience than the Life Skills Program, and is open to those residents who have completed LSP and to new residents who require less structure than LSP provides. TLP residents tend to be older (generally between 15 and 18 years old). As with LSP, school attendance is required and

academic performance is monitored. In TLP there are both formal and informal elements of the residential milieu which differentiates the content of the program from LSP. Formal elements include one weekly milieu meeting, small group meetings twice a week, individual therapy once a week, daily meetings between each resident and his child care worker (also called an "advocate"), and structured study and tutoring time during the academic year. As with LSP, the formal and informal elements of the program are monitored. Formal staffings are held for each resident every three months. After the initial three month transition is completed, TLP residents are expected to hold part-time employment outside the institution. All TLP residents are expected to complete high school or to prepare for the General Equivalency Degree (GED). Residents are given assigned chores to maintain the physical milieu environment. Privileges are earned and increased autonomy results from successful compliance with requirements of the program. The length of residency in the Transitional Living Program is, on average, between six and twelve months.

The study was structured to include sampling of subjects from both the LSP and TLP populations. A total of 96 subjects participated in the study. They tended to be younger adolescents (22 were 14 years old, 34 were 15 years of age, 23 were 16 years old, 12 were 17 years old, and 5 were 18 years old). Not surprisingly, given that many were recommended for residential placement due to academic problems, the majority of subjects were freshmen ($n = 46$), or sophomores ($n = 27$), with 17 in their junior year and 6 seniors. The racial breakdown included slightly over half African-Americans ($n = 50$), followed by Caucasians ($n = 27$), and Hispanics ($n = 19$). Subjects tended to belong to small family groupings, with 44 subjects having one or no other siblings, 37 subjects having two or three siblings, and 15 subjects coming from families ranging in size from four to nine siblings. In terms of placement within the family of origin, 43 subjects were the oldest siblings, 26 were middle children, 12 were the youngest siblings, and 15 were

only children. A significant number came to residential placement from settings outside of living with a parent (those listing "not living at home" included 30 subjects, most of whom were relocating from foster care). Participants entering the program from single parent homes totaled 40 subjects, while those relocating from homes with two parents in residence totaled 26 subjects.

Initial data were collected at the onset of their residency with three and six month follow-up outcome measurements. Subjects who dropped out of either program before the three or six month follow-up measurement were included in the study.

Procedure

Initial data were collected by means of self-report questionnaires. Because of the age group of the subjects, it was determined that informed consent should include not only their parents or legal guardians but the subjects themselves; the consent process was explained to both potential subjects and their parents/guardians. Since subjects were legal minors, and even though no experimental manipulation was involved, the process of safeguarding participants' rights was addressed as an important consideration by the investigator. The use of the inclusive informed consent form, which involved an explanation of the nature of the study both to potential subjects and their legal guardians and which required the consent of both before conducting the investigation, was designed to address this concern. It was explained to each potential subject that participation in the research project was completely voluntary. If either the adolescent or parent/guardian was unwilling to grant consent, they were not included in the study. At the time consent forms were signed, demographic information forms were also completed. All information collected was further protected by the use of coded response forms to maintain the anonymity of subjects during both the initial data collection and during the collection of outcome data.

During the initial period of their entrance into residential care, subjects were given two written social support measures to complete (the Social Support Appraisals Scale and the Social Support Behaviors Scale). The measures were given with oral and written instructions to subjects who completed them individually.

Outcome measures gathered for that subset of the subjects who remained in their program up to the three and six month follow-up data collection times. Residential care staff members completed the outcome measures as part of the normal evaluation process for each resident. Outcome measures were completed at three month intervals following admittance to residential care and consisted of the staff tabulating a count of incidents of truancy and delinquency and completing the AML Rating Form (Cowen et al., 1973).

The most difficult facet of the investigative procedure derived from the nature of the population investigated and the application process for residential placement. Data collection was subject to the availability of individuals in need of and interested in residential care. It was complicated by the problem of availability of space at the residential care facility at any given time to accommodate interested applicants. This was further affected by the nature of a voluntary study with an adolescent male population that necessitates the free and willing cooperation of new residents to participate in a study that was not mandated either by parents or the institution.

Instrumentation

The initial investigation consisted of two parts. The preliminary task involved the explanation of the project to potential subjects and their guardian/parent (see Appendix A for the informed consent procedure and forms) and eliciting their involvement. This task culminated in the completion of informed consent forms both by each subject and by his guardian/parent and by their providing basic demographic information (see Appendix B for the demographic information form). The second part of the initial phase of the

investigation consisted of each subject completing the Social Support Appraisals Scale (Vaux et al., 1986) (see Appendix C) and the Social Support Behaviors Scale (Vaux, Riedel, & Stewart, 1987) (see Appendix D).

The second phase of the investigation involved the collection of outcome measures at three and six month intervals from the beginning of residential care. The task consisted of staff members tabulating counts of delinquency and truancy that occurred during the prior three months (see Appendix E for tabulation forms) and completing the AML Rating Scale (see Appendix F). The same procedure was followed both at the three month and six month follow up data collections.

The Social Support Appraisals Scale (SSA)

The Social Support Appraisals Scale (Vaux et al., 1986) is a 23 item self-report instrument that gauges perceived social support. It is based on Cobb's (1976) definition of social support, namely, that one is loved, respected, and esteemed by and involved with family, friends, others, and total. Three scores are computed from the SSA: a total score based on all 23 items, a "family support score", and a "friends support score".

All scales (total, family, and friends) have been reported by Vaux (Vaux et al., 1986) to have good internal consistency reliability across five student and five community samples. Reported mean Cronbach alpha coefficients were .90 total, .80 family, and .84 friends for the five student samples; and .90 total, .81 family, and .84 friends for the five community samples.

Convergent and divergent validity was assessed by Vaux utilizing six other subjective supportive-appraisal instruments, with network resources and supportive behavior measures, with distress and well-being measures, and with personality measures. Although the reported associations with other support appraisal instruments were not strong, Vaux suggests that this is partially due to the varied theoretical bases of the other

instruments, ranging from an $r = .47$ association with the satisfaction measure to a .70 association with the more homogeneous subscale measures. Where convergence was most expected, Vaux reported that relationships were in the .50 to .80 range, which he stated compares favorably with the validity data that have been reported in other perceived social support measures. The majority of observed observations between the SSA and support appraisals, support resources, and distress measures incorporated in Vaux's analysis demonstrate a consistent pattern across measures and types of subjects (Vaux et al., 1986).

The Social Support Behaviors Scale (SSB)

The Social Support Behaviors Scale (Vaux et al., 1987) is a self-report inventory of 45 items that assesses the perception of the respondent to five modes of supportive behaviors. The assessment of multiple modes of support follows from Vaux's assertion (Vaux et al., 1987; Vaux, 1990) that social support is a metaconstruct consisting of resources, behaviors, and appraisals of support. Within the construct of supportive behaviors, Vaux delineates five modes of behavior that provide support; these include "emotional support", "socializing support", "practical assistance", "financial assistance", and "advice/guidance". Respondents are asked to indicate how likely family members and friends would be to engage in each behavior in time of need.

Vaux operationalizes each mode in the following way. Under "emotional support" he includes ten items ("comforted me when I was upset", "joked around or suggested doing something to cheer me up", "listened when I needed to talk about my feelings", "gave me encouragement to do something difficult", "showed me that they understood how I was feeling", "gave me a hug or otherwise showed me I was cared about", "did not pass judgment on me", "was sympathetic when I was upset", "stuck by me in a crunch", "showed affection for me").

Socializing support was operationalized utilizing seven items ("suggested doing something just to take my mind off my problems", "visited with me or invited me over", "had lunch or dinner with me", "went to a movie or concert with me", "had a good time with me", "chatted with me", "called me just to see how I was doing").

Practical assistance support was operationalized using eight items ("gave me a ride when I needed one", "looked after my belongings for a while", "loaned me a car when I needed one", "helped me out with a move or other big chore", "loaned me tools, equipment, or appliances when I needed them", "showed me how to do something I didn't know how to do", "talked to other people to arrange something for me", "offered me a place to stay for awhile").

Financial assistance support was defined utilizing eight items ("paid for my lunch when I was broke", "bought me a drink when I was short of money", "helped me out with some necessary purchase", "loaned me money for an indefinite period", "bought me clothes when I was short of money", "brought me little presents of things I needed", "loaned me money and wanted to 'forget about it' ", "loaned me a fairly large sum of money").

Advice/guidance was operationalized using twelve items ("suggested how I could find out more about a situation", "suggested a way I might do something", "gave me advice about what to do", "helped me figure out what I wanted to do", "helped me decide what to do", "helped me figure out what was going on", "told me who to talk to for help", "told me about the available choices and options", "gave me reasons why I should or should not do something", "told me the best way to get something done", "told me what to do", "helped me think about a problem").

Vaux, et al. (1987) utilized five strategies to assess the adequacy of the SSB as a measure of five distinct modes of available supportive behavior: through the classification of items by judges; by analogue simulation of samples deficient in each mode of support;

by testing for convergent and divergent validity utilizing a related measure of supportive behaviors; by an examination of levels of each mode of support provided for different problems; and by confirmatory factor analysis.

Vaux and his associates (1987) reported that independent judges correctly identified items, indicating excellent content validity. Subjects in the analogue simulation procedure provided evidence of subscale sensitivity by demonstrating mode-specific supportive behavior for varying problems.

Associations between the SSB and the Inventory of Socially Supportive Behaviors (Barrera, Sandler, & Ramsay, 1981) were studied by Vaux, who reported that associations between the instruments were small but consistent with predicted patterns of convergence, although less consistent with predicted patterns of divergence.

Internal consistency reliability was computed by Vaux for each of the five modes by family and friends for African-American and Caucasian samples. Twenty Cronbach Alphas resulted. Mean alphas were .90 for family and .89 for friends in the African-American sample, and .86 for family and .83 for friends in the Caucasian sample group.

The factor analytic results reported by Vaux indicated that the factor loadings of SSB items on each of the five modes of supportive behaviors were consistent with predictions. All items loaded significantly (most were $> .70$) on the factor they were designed to measure and did not load on other factors (most were $< .40$), with the single exception of Item 1 ("Suggested doing something, just to take my mind off my problems") which loaded on emotional support and not socializing support.

The AML Rating Scale

The AML rating form (Cowen et al., 1973) is an eleven item screening device for maladaptive behaviors. It is reported to be suitable for use with children in grades one

through twelve (Rowlinson & Felner, 1988). The frequency of each of eleven maladaptive behaviors is rated on a five point scale (1 = never occurs, 2 = seldom occurs, 3 = occurs moderately often, 4 = occurs often, 5 = occurs most or all of the time); adult observers complete the rating for each subject. In its original form the AML had three subscales, from which the scale takes its name. The AML-A assesses acting out behavior; the AML-M assesses moodiness or shy and withdrawn behavior; and the AML-L assesses learning difficulties. A total maladjustment score (AML-T) is obtained by summing the subscale scores.

Preliminary reliability and validity research was conducted by its authors on elementary school samples. Test-retest reliability, utilizing teacher ratings at a two-week interval, yielded reliability coefficients ranging from .80 (M) to .86 (A) for the various subscales and subscale intercorrelations ranging from .37 to .55 on the two testings.

Concurrent validity studies compared AML ratings with three popular behavior rating instruments (the Teachers Behavior Rating Scale, the Teachers Adjective Check List, and the Ottawa School Behavior Survey). Reported intercorrelations of the total scale scores among the four instruments were high; the median r was .78. In a separate study (Cowen et al., 1973), the AML was shown to discriminate sharply between children referred to a mental health project and children not referred.

The AML was originally designed for use with an elementary school population but has been applied with adolescent populations (Rowlinson & Felner, 1988) as a quick screening device to elicit from adult observers the presence or absence of maladaptive behaviors.

Design and Data Analysis

The study was correlational in nature. The data sets generated from the investigation were manipulated in a five step process selected both to conform to the need

for the best solution to the research questions being posed and as the most appropriate statistics for the nominal and ordinal data generated by the study. First, frequency distributions were run and all possible intercorrelations were delineated in order to create a summary of the relationships among the variables. Second, chi-square analyses were completed to determine the presence, or lack, of relationships between social support and outcome variables and between descriptor and social support variables.

The first two steps were helpful in describing relationships between variables, but were limited as explanatory statistics to simple, linear interpretations of relationships. The complex interaction of multiple variables in explaining relationships between variables in clinical studies depends on more sophisticated statistics, yet solutions that are appropriate for the types of data and the research questions involved. It was not the purpose of this study to create a test that predicts successful adjustment to residential care. Rather, it attempted to better understand and explain the nature of social support as it relates to a highly specific population; in this way, it served to test and further develop social support theory. The statistical solution employed here was to design an integrated, sequential analysis, using various statistics in a stepwise manner in order to classify and more thoroughly interpret the nature of the relationships among the data.

This process consisted of three related steps. First, cluster analysis procedures were employed in order to identify group membership using the characteristics of the cases themselves to establish the classification. The second step was to utilize a stepwise discriminant analysis procedure in order to identify which variables in the identified groups contributed the most to the outcomes. Finally, analyses of variance was employed as a confirmatory statistic.

The treatment of the data depended on the type of correlation procedure being used for analysis. For instance, when comparing LSP and TLP residents, the programs (LSP or TLP) acted as independent variables and all other measures were dependent

variables. In contrast, when considering social support itself, SSA and SSB scores and relevant demographic data were treated as independent variables and the outcome measures were treated as dependent variables.

The data set generated from premature program dropouts (i.e., those who left either LSP or TLP before the end of the study) were treated by interpreting premature termination as unsuccessful adjustment. This data set was considered to be crucial given that a goal of the investigation was to determine whether it is possible to "map" the components of perceived social support by a specific population.

Two null hypotheses could be tested utilizing data from subjects who terminated their program before the outcome measures could be compiled:

1. There is no relationship between social support scores and adjustment to residential care. To reject this null hypothesis, a positive relationship should exist between low SSA scores and premature termination.
2. There is no relationship between a specific mode of perceived social support and adjustment to residential care. To reject this null hypothesis, each mode assessed as low support in the SSB (emotional support, socializing support, practical assistance, financial assistance, and advice/guidance) should be positively related to premature termination.

It should be noted that data sets were gathered and treated in the same way for those subjects who prematurely terminated their program as for those subjects who remained in the program.

The risks involved in this investigation were minimal. Activities required of participants were limited to four questionnaires that could be completed at a single sitting. It was anticipated that some anxiety might exist related to three issues: the protection of anonymity, who would have access to the information gained, and any consequences for choosing not to participate in the study. All of these issues were addressed in the written

and oral explanations given to potential participants prior to asking their consent. The anonymity of participants was protected through the utilization of coded response forms. Master copies that linked participants' names with the codes utilized were kept secure from both the institutional staff and the investigator who analyzed and interpreted the data generated from the study. The voluntary nature of participation was explained to participants and their guardians in both written and oral communication, as was the independence of the study and its results from information to which the residential care institution staff would have access.

No participants suffered adverse consequences due to the investigation nor did any subject require counseling related to their participation either during the course of the study or in its aftermath, although provision was made for remediation to be made by an experienced therapist if needed.

In any investigation, benefits must outweigh the costs. It was believed at the onset of this study that several potential benefits justified the inquiry. First, a study measuring the specific components of perceived social support that this investigation was designed to address, with a vulnerable adolescent population such as the population assessed in this study, has not been previously conducted. Second, while social support research has increased exponentially over the past twenty years, precision in measurement and comparability of results has been lacking. The instruments in this study were chosen for their demonstrated positive psychometric properties and had been used previously with other sample groups. Third, until recently, social support typically had been measured as a global phenomenon. This had led to ambiguous and sometimes contradictory results being reported in the professional literature. A more finely nuanced operationalization of specific social support components was understood by the investigator to add to the knowledge base concerning which modes and sources of social support are related to a particular type of life stress for a specific population. Fourth, it was hoped that the

findings from this investigation would help clarify the relationship between the subjective perception of support by adolescents and adjustment. Finally, it was expected that this investigation ultimately might prove helpful to those involved in clinical interventions as it clarifies for the clinician the role of various types and sources of support in a specific context, and that might be used to shape more precise interventions in the future.

CHAPTER IV

RESULTS

This study was designed to test several hypotheses concerning the relationship between social support provisions and adjustment to residential care. An analysis of the data sets resulted in the following conclusions. First, when taken individually, social support provisions were not found to be significantly related to adjustment to residential care. Second, the analysis revealed differences between the various sources of social support and outcomes. Third, even though, when considered individually, social support variables were not found to be significantly related to outcomes, when other descriptive variables such as family structure were entered into the equation, a relationship was found to exist between social support and adjustment. Fourth, the analysis revealed that some, but not all, types of social support were related to adjustment to residential care. Fifth, when cases were clustered using social support variables, associations between social support provisions and adjustment to residential care were found to exist. Finally, a discriminant analysis procedure applied to the data set indicated that several variables were related to social support and adjustment to residential care.

The first step in analyzing the data was to produce an overview of the cases by creating a summary description of the subjects and the relationships among variables. Because of the population from which the research subjects were gathered, the various demographic and background variables assume greater descriptive importance. A summary description of all the cases is found in Table 1, (Appendix G). Cases are

described in the table in terms of their residential care program (LSP or TLP) and comparisons are shown between total subjects beginning the study and those still in residential care after six months (termed "successful outcome at six months").

This overview revealed several patterns. A maturity factor may be involved in adjustment. For instance, the older the subjects' ages, the more likely they were to adjust successfully to residential care after six months; likewise, first-born children seemed somewhat more likely to have adjusted after six months than those whose birth order was later. An unanticipated finding was the discovery of a higher rate of adjustment at six months for those from single parent and single-adult led households than for those from homes with two or more adults present or for those from two parent homes.

A total of thirteen descriptors of social support were included in the analysis (three social support appraisal scores, and five measures each of supportive behaviors provided by family and friends). Three outcome measures were also included ("truancy", "delinquency", and "adaptive behaviors") measured at three and six month follow-up time intervals. Intercorrelations among variables are summarized along with mean scores and standard deviations in Table 2 (Appendix H). A low or moderate correlation was found for most of the variables studied. Predictably, the five categories of social support (SSB) from family showed a strong positive intercorrelation among family support subscales; a similar strong positive correlation among variables was found among the five SSB measures of support from friends.

The intercorrelations between predictor and outcome variables are also reported in Table 2. None of the social support variables demonstrated more than a moderate correlation with the various outcome measures. Almost all of the SSB subscales of "support from family" showed very few intercorrelations with the outcome measures. The subscale of "advice and guidance from family" showed a weak correlation with the "number of incidents of truancy at 6 months" outcome measure ($r = .0042$). The SSB

subscales of "advice and guidance from family", "financial support from family", and "practical assistance from family" all reported weak correlations with adjustment behaviors at 6 months as measured by the AML rating form ($r \leq .0080$). In addition, the social support appraisals (SSA) subscale of "support from others" (i.e. neither from family or friends) was weakly correlated to truancy outcome measure either at 3 months ($r = -.0060$) or at 6 months ($r = .0106$). These findings are fully summarized in Table 2.

It should be noted that a preliminary examination of the data set uncovered a problem with the way the construct of "outcome performance" had been measured. The outcome measures that had been initially selected (truancy counts, delinquency counts, and behavior rating scores) were chosen to correspond closely to the content areas of the performance reviews conducted every three months for each adolescent in the institutional population by the staff of their respective residential care program. However, in practice, a consistent corresponding relationship was not demonstrated between the individual outcome measures and residents actually remaining in residential care after six months. In part, this was due to the large number of subjects leaving residential care prior to the six month follow-up period. A decision was made, then, to distinguish between measurement of outcome by use of the performance variables (truancy, delinquency, and behavior ratings) and the measurement of outcome by a subject's being able to maintain "presence in residential care after six months" versus "leaving the program prior to six months". That is, although the criteria for remaining in residential care as articulated by the institution itself (few incidents of truancy, delinquency, or behavior problems) were not found to be strongly related to a resident's actually remaining in program, this situation did not affect the basic direction of the study. In fact, significant findings were discovered when "successful adjustment at six months" was measured by defining the domain of adjustment directly, as "still present in the program at six months", instead of defining successful adjustment by the use of more indirect, institutional descriptors of adjustment

("truancy", "delinquency", and "behavior ratings"). Both approaches were systematically treated in the examination and interpretation of the results.

Treatment of the Data

Data utilized in the study were of several types and, consequently, were treated in different ways. General demographic information for each subject was collected (including age, academic year, and race) as well as more detailed background information describing the subject's family (including whether or not the subject was living at home prior to entrance into residential care; whether the subject's caregiver was a single parent, two parents, or a guardian; the number of children living in the home; the number of adults; and birth order for each subject). Some of the demographic information produced nominal data (such as racial background), while other background information generated ordinal data (age, grade, birth order, number of children, number of adults).

The questionnaires employed in the study produced several scales descriptive of discrete types and sources of perceived social support. The Social Support Appraisals Scale (SSA) generated three subscales describing adolescent appraisals of family support, support from friends, and support from others, and a global scale consisting of the sum of the three subscale scores. Since each of these scales differs in length, for interpretation purposes the raw scores were converted to standardized t-scores (with a mean of 50 and standard deviation of 10) and z-scores (with a mean of zero and standard deviation of one).

The Social Support Behaviors Scale (SSB) was designed to examine the domains of family and friends' support from a different perspective than the SSA. The SSA is a brief (23 items) instrument created to elicit perceptions of support given by different parts of a supportive network (family, friends, others). The SSB, although crafted to access somewhat similar domains (family, friends), is a more detailed instrument (45 items each

on a family scale and friends scale), directed at examining five specific types of supportive behaviors.

Like the SSA, the SSB subscales are constructed of varying numbers of items for each subscale, resulting in raw scores ranging from a high of 35 (for the "socializing support" subscale) to a possible raw score of 60 (for the "advice/guidance support" subscale). Given these differences across scales, a similar conversion was performed on SSB raw scores to create t-scores and z-scores, allowing for comparisons among the various subscales.

Outcome data were reported in two forms. First, numerical counts were made of the number of incidents of truancy and delinquency. These raw scores were not converted. Second, the AML Rating Scale produced scores that rated on a scale of 1 to 5 the frequency of 11 maladaptive behaviors, resulting in a range of scores from a low of 11 (seldom or never exhibits maladaptive behaviors) to a high of 55 (always exhibits maladaptive behaviors). AML raw scores were not converted.

The overarching goal in analyzing the data was to move from broad, global findings to a more nuanced description of the relationships among variables and between predictor and outcome variables.

Chi-Square Analyses

Hypotheses were tested first utilizing a series of chi-square analyses. This procedure was selected to fit the research questions which focused on the possible relationships between (among) the nominal and ordinal variables. As a test of independence, the chi-square procedure provides a probability estimate that the obtained frequencies occurring in a population differ from chance results. A very low reported probability score indicates that two variables are probably not independent in a

population, which is sufficient to reject the null hypothesis of independence ("no relationship") (Norusis, 1988).

In this study, reported probability levels $\leq .05$ were considered significant. This level of significance was chosen in part because of the restrictions imposed by the nature of the research sample and in part because of the nature of the study. The size of the sample produced limitations on the structure of procedures, the classification of data, and the interpretation of results. A less restrictive decision rule for significance fits the parameters of the actual data. Remember that the overall purpose of the investigation was intended to be, at least in part, exploratory in nature. As such, inclusivity rather than exclusivity in reporting results served the purpose of building a knowledge base concerning the relationship between highly nuanced content areas of social support provisions in a highly specialized population. Although a significance level of .05 was considered to be sufficiently rigorous to elicit meaningful results, more restrictive significance levels $< .01$ and $< .001$ are also reported.

As an analytical tool, the chi-square procedure is itself somewhat limited, in that although it produces a measure of association between variables, it does not allow conclusions to be drawn as to the strength or direction of association between those variables (Norusis, 1993). To address this, the Goodman-Kruskal Gamma (γ) statistic is reported in the chi-square results tables that summarize ordinal data. Gamma calculates the difference between discordant and concordant pairs of cases, allowing inferences to be drawn regarding the relative relationship, positive or negative, between those cases (Norusis, 1988).

In this study, chi-square analyses were used to test two null hypotheses: 1), that there is no relationship between the social support scores and successful outcome at six months; 2), that there is no relationship between the descriptor variables (family structure and demographic variables) and the social support rating scores.

As a global statement based on these analyses, the SSA scores and SSB subscale scores alone were not found to be significantly related to adjustment at six months to residential care. No SSB score was found to be significantly related to adjustment at six months. Only one social support appraisals (SSA) score was found to be significant ("social support from others"). This variable had a reported chi-square (1, $n = 96$) = 4.01, $p < .05$. It should be noted that when other contributing variables, such as family structure, age, and grade were considered along with the social support measures in the analysis, a more nuanced description emerged.

Family structure was examined around four dimensions, two describing adult structures ("parental structure", "number of adults in the home") and two describing sibling structures ("birth order of the subject", "number of children in the family").

Parental Structure

The parental structure dimension was broken down into four discrete components of the variable ("living with a single parent", "living with two parents", "not living at home prior to entry into residential care", and "living at home with someone other than a parent"). These components were tested utilizing chi-square analyses with all the social support and outcome measures. The parental dimension was found to be related to several support scores for the LSP residents, but was not significantly related to any of the support scores for TLP residents.

Two of the three social support appraisal scores (SSA) were found to be significant for LSP subjects. "Support from friends" yielded a chi-square value (2, $n = 55$) = 7.97, $p < .02$. "Support from others" yielded a chi-square value (2, $n = 55$) = 9.07, $p = .01$.

No significant relationships between parental structure and any of the five modes of support from the family were found on the social support behaviors (SSB) scales.

However, significant relationships were found between parental structure and three of the modes of support from friends ("financial support", "practical assistance", and "socializing support"). The social support (SSA and SSB) by "parental structure" chi-square findings are summarized in Table 3 (Appendix I).

What the parental structure chi-square analysis is that responses to the SSA "support from friends" was three times as likely to be perceived as being below average when the resident came from a single parent-led household ($n = 18$, $n = 6$, respectively). "Support from friends" was only half as likely to be rated below average when respondents came from a household led by two parents ($n = 14$, $n = 7$, respectively).

The SSA "support from others" scale showed that support from others was slightly more likely to be rated below average for residents from single parent-led households ($n = 13$, $n = 11$, respectively). Residents from two parent-led households were far less likely to rate support from others below rather than above average ($n = 4$, $n = 17$, respectively).

Responses to the SSB showed that three types of supportive behavior were related to parental structure. "Socializing support from friends" (i.e., social activities shared with others) produced the most robust results (chi-square value (2, $n = 54$) = 12.74, $p = .001$). "Practical support from friends" (i.e., concrete assistance offered by others) yielded a chi-square value (2, $n = 54$) = 7.52, $p < .05$. "Financial support from friends" yielded a chi-square value (2, $n = 54$) = 7.34, $p < .05$.

The social support behaviors (SSB) scores indicated that residents from single parent-led households were almost twice as likely to rate socializing support from peers below average than to rate it above average ($n = 15$, $n = 8$, respectively). Residents from two parent-led households were far less likely to rate socializing support from their friends below average, and more likely to rate it above average ($n = 3$, $n = 18$, respectively).

Residents from single parent-led households were more than three times as likely to rate practical assistance support lower than average than to rate it above average ($n =$

18, $n = 5$, respectively). Those from two parent-led homes were less likely to rate practical assistance support from friends below rather than above average ($n = 8$, $n = 13$, respectively).

This pattern was consistent with the findings related to financial support from friends. Those from single parent-led homes were almost three times more likely to rate financial support from friends below average rather than above average ($n = 17$, $n = 6$, respectively). Those from two parent-led homes were only half as likely to rate it below average ($n = 7$, $n = 14$, respectively). In all cases, those not living at home were almost evenly divided in rating support from friends above or below average across all three sources of support (i.e., from family, friends, and others).

The relationship between parental structure across all groups (TLP/ LSP, unsuccessful/successful adjustment) and adjustment at six months was found to be significant (chi-square value (2, $n = 96$) = 6.72, $p < .05$). In this instance, the outcome measure employed ("successful adjustment at six months") was a simple binary descriptor assessing whether or not residents were still in the program at six months or had left the program prior to six months.

The data indicated that residents from single parent-led households were equally as likely to have remained in the program ($n = 20$) as to have left prematurely ($n = 20$). However, residents from households led by two parents were three times more likely to have left prematurely ($n = 27$) as to have remained in the program ($n = 9$). Residents who had not lived at home prior to placement were slightly more likely to have remained in the program ($n = 11$) as to have left ($n = 9$).

Number of Adults

Because the research population included several subjects from non-traditional family structures, an attempt was made to assess the family structure domain with a

wider-net approach than a simple "single parent-led" versus "two parent-led household" dimension affords. Other adults in the household might include resident extended family members, grandparents, adult siblings, or a caregiver's cohabiting partner. This was assessed by comparing all other adult structures to the predominant adult structure in this study, the one adult-led household. Possible relationships were examined utilizing a series of chi-square analyses with all the social support and outcome measures.

Results from the SSA indicated no significant relationships. Results from the SSB subscales, however, indicated that a significant relationship does exist between the number of adults in the household and perceived support from friends. This occurred on several subscales of the SSB for the total population, for those from both LSP and TLP programs who had successfully adjusted at six months, and for all LSP residents (both successful and unsuccessful adjustment). These findings are summarized in Table 4 (Appendix J).

For the total population, three subscales of supportive behavior from friends were significant ("emotional support", "practical assistance support", and "financial support"). Emotional support from friends yielded a chi-square value ($1, N = 95$) = 4.42, $p < .05$. Practical assistance support yielded a chi-square value ($1, N = 95$) = 3.99, $p < .05$. Financial support yielded a chi-square value ($1, N = 95$) = 3.90, $p < .05$.

Residents from households with only one adult were more likely to rate emotional support from friends below average than above ($n = 17, n = 13$, respectively). Those from multiple-adult households were only half as likely to rate emotional support from friends below average ($n = 22, n = 43$, respectively).

Residents from single-adult households were more likely to rate practical assistance from friends below average rather than above average ($n = 20, n = 10$, respectively). Those from multiple-adult households were less likely to rate practical assistance from friends below rather than above average ($n = 29, n = 36$, respectively).

Those residents from single-adult households were more likely to rate financial support from friends below rather than above average ($n = 19$, $n = 11$, respectively), while those from multiple-adult households were less likely to rate financial support from friends below rather than above average ($n = 27$, $n = 38$, respectively).

For all subjects from both the LSP and TLP programs who remained in the program at the six month follow-up, several subscales of support from friends ("emotional support", "practical support", and "socializing support") also yielded significant findings. "Emotional support from friends" yielded a chi-square value (1 , $n = 40$) = 10.94, $p < .001$. "Practical assistance support from friends" yielded a chi-square value (1 , $n = 40$) = 7.52, $p = .006$. "Socializing support from friends" produced a chi-square value (1 , $n = 40$) = 5.08, $p < .05$.

Successful residents ("all in program at six months") from single-adult households were more likely to rate emotional support from friends below average than above ($n = 10$, $n = 6$, respectively), whereas those from multiple-adult households were far less likely to rate emotional support from friends below average than above ($n = 3$, $n = 21$, respectively).

Successful residents ("all in program at six months") from households with a single adult were more likely to rate practical assistance from friends below rather than above average ($n = 11$, $n = 5$, respectively), while those from multiple-adult households were only a third more likely to rate practical assistance from friends below rather than above average ($n = 6$, $n = 18$, respectively).

Successful residents ("all in program at six months") from single-adult households were equally likely to rate socializing support from friends below or above average ($n = 8$, $n = 8$), while those from multiple-adult households rated socializing support from friends below average only one fifth as often as above average ($n = 4$, $n = 20$, respectively).

Residents from the LSP program, including those LSP residents still in the program at six months and those who left prior to six months mirrored the findings of "support from friends" for all successful residents ("all in program at six months"). "Socializing support from friends" for LSP residents yielded a significant chi-square value ($1, n = 54$) = 6.87, $p < .01$. "Practical assistance support from friends" yielded a chi-square value ($1, n = 54$) = 6.31, $p = .01$. "Emotional support from friends" for LSP residents yielded a chi-square value ($1, n = 54$) = 4.20, $p < .05$.

For those LSP residents from single-adult households, "socializing support from friends" was twice as likely to be rated below average than above ($n = 12, n = 5$, respectively). Those from multiple-adult households were only half as likely to rate socializing support from friends below rather than above average ($n = 12, n = 25$).

LSP residents from households with single-adults were far more likely to rate "practical assistance from friends" below average than above ($n = 14, n = 3$, respectively), while those from multiple-adult households were slightly less likely to rate practical assistance from friends below average than above ($n = 17, n = 20$, respectively).

LSP residents from single-adult households were also more likely to rate "emotional assistance from friends" below average than above ($n = 12, n = 5$, respectively), while those from multiple-adult households were less likely to rate emotional support from friends below average ($n = 15, n = 22$, respectively).

Number of Children in the Family

Many researchers consider the number of children in the family to be a salient factor in an examination of family support. In this study, the number of children in the residents' families varied from a low of one child to a high of ten children per family. For analytical purposes, data sets were clustered into small family (one or two children) and large family (three or more children) groupings in order to examine the possible

relationships between sibling structure and perceived social support. Chi-square analyses were then conducted on all the social support and outcome measures.

For the total population, the number of children in residents' families was not found to be significantly related to successful adjustment at six months, nor to the social support scores on either the SSA or SSB and was not found to be significantly related to the social support measures for the LSP program subjects. However, it was found to be significantly related to two measures of support for the TLP program residents (on the SSA "support from others" scale and the SSB subscale of "practical assistance support from family"). These findings are presented in Table 5 (Appendix K).

For TLP respondents, which included both those who remained in residential care for six months and those who left prior to six months, the SSA "support from others" scale yielded a chi-square value ($1, n = 41$) = 4.81, $p < .05$. Among all SSB subscales for both family and friends, only the subscale of "practical assistance support from family" yielded a significant result, with a chi-square ($1, n = 41$) = 4.19, $p < .05$.

The SSA results indicate that TLP residents from households with just one or two children were more likely to rate support from others below average than to rate it of more than average importance ($n = 12, n = 4$, respectively). Those from households with three or more children were less likely to rate support from others below average than above ($n = 10, n = 15$, respectively).

The SSB results for the "practical assistance support from family members" subscale indicate that TLP residents from households of only one or two children rated practical assistance from family members below average ($n = 11, n = 5$, respectively). Those from families with three or more children were more likely to rate practical assistance from family members above average ($n = 9, n = 16$, respectively).

Birth Order

The birth order of the participants was examined utilizing four discrete components of the variable ("oldest child", "middle child", "youngest child", and "only child"). Chi-square analyses were conducted on all the social support and outcome variables. Only the SSA "support from others" scale for subjects who left the program before completing six months was found to be significant ($3, n = 56 = 7.80, p = .05$). It should be noted that this analysis produced two insufficient cells ($n < 5$), so the categories of the variable were reconfigured and "youngest child" and the "only child" data sets were combined. This produced a chi-square value for the SSA "support from others" scale of ($2, n = 56 = 2.68, p > .10$). Utilizing the combined categories of "youngest child" and "only child" in another series of chi-square analyses, birth order was not found to be significantly related to any of the social support or outcome measures.

Race

Racial groups represented in the research population included African-American ($n = 50$), Caucasian ($n = 27$), and Hispanic ($n = 19$) subjects. For the total population ($N = 96$), no significant relationships were found to exist between the race variable and any social support or outcome measures. However, when considered separately, four variables were found to be of significance, one each from those subjects who were successful at six months (SSA "support from family" scale, $n = 40$), the subjects who left before six months (SSB subscale "financial support from friends", $n = 55$), the total LSP population (SSB subscale "practical assistance support from friends", $n = 54$), and the total TLP population (SSB subscale "socializing support from friends", $n = 41$). Chi-square analyses were conducted for all the social support and outcome measures. The results are summarized in Table 6 (Appendix L).

The SSA score for "support from family" for residents successful at six months yielded a chi-square of $(2, n = 40) = 8.10, p < .02$. The SSB subscale of "financial support from friends" produced a chi-square value of $(2, n = 54) = 8.77, p = .01$. The LSP subjects (including those who remained in the program at six months and those who left before six months) yielded a SSB subscale score for "practical assistance support from friends" with a chi-square value of $(2, n = 54) = 9.65, p < .01$. The TLP subjects yielded a SSB subscale score for "socializing support from friends" with a reported chi-square of $(2, n = 41) = 7.39, p = .02$.

African-American residents who were successful at six months reported fewer below average than above average ratings of Social Support Appraisals (SSA) support from family ($n = 9, n = 11$, respectively). Successful Caucasian and Hispanic residents, however, tended to rate support from family below average rather than above ($n = 17, n = 3$, respectively).

Among those who left the program before the six month adjustment period was over, the SSB subscale scores related to "financial support from friends" indicated that African American residents rated it below average more often than above ($n = 20, n = 9$, respectively). Hispanic residents were almost evenly divided between below average ratings ($n = 5$) and above average ($n = 6$). Caucasian residents were much less likely to rate financial support from friends below average than above ($n = 3, n = 11$, respectively).

For the residents from the LSP program, the SSB subscale of "practical assistance support from friends" stood out. Both African-American and Hispanic residents were more likely to report below average rather than above average ratings of practical assistance from friends ($n = 29, n = 13$, respectively), compared to Caucasian residents who were less likely to rate practical assistance from friends below average ($n = 3, n = 9$, respectively).

For TLP program respondents, the SSB subscale of "socializing support from friends" was rated above average more often than below average for both African American and Caucasian residents ($n = 26$, $n = 6$, respectively, with both groups combined), and was almost evenly divided between above and below average for Hispanic residents ($n = 4$, $n = 5$, respectively).

Age

Age is also considered by researchers to be a salient component of adolescent adjustment, so the age of the participants was considered in a series of chi-square analyses. Age, however, was not found to be significantly related to any of the social support or outcome scores when considered for either the LSP or TLP groups alone, nor when the total population was included in the analysis.

Grade

Grade is also considered by researchers to be significant in describing adolescent adjustment. A series of chi-square analyses were carried out for all social support and outcome measures for each of the TLP and LSP groups, and for the total population. Only one scale, the SSA "support from others" scale was found to be significant for TLP residents. It produced a chi-square value of $(1, n = 41) = 5.47, p < .02$. On this scale, as for all TLP and LSP analyses, residents' grade levels were collapsed into lower and higher grade groups (the prior including freshmen and sophomores, the latter including juniors and seniors). Table 7 (Appendix M) summarizes SSA scores across groups by grade.

Responses indicated that lower grade respondents were more likely to rate support from others below average than above ($n = 15$, $n = 6$, respectively), while the higher grade respondents were less likely to rate support from others below average and more likely to rate it better than average ($n = 7$, $n = 13$, respectively).

Outcome at Six Months

Finally, for the total population, a series of chi-square analyses were conducted to test for a relationships between any of the social support predictor variables (SSA and SSB scores) and the outcome variables (here defined as a resident still in the program at the six month follow-up measurement). Table 8 (Appendix N) summarizes SSA scores and outcome adjustments at six months.

One predictor was found to be significant, the SSA "support from others" scale. This yielded a chi-square value of $(1, N = 96) = 4.01, p < .05$.

Residents reporting "support from others" to be below average were slightly more likely to have remained in the program at six months ($n = 24$), as opposed to those who left prior to six month follow-up ($n = 22$). Residents who rated support from others above average were only half as likely to have remained in the program at six months ($n = 16$) as to have dropped out prior to six month follow-up ($n = 34$).

Sequential Analysis

Since this study was designed to investigate the heuristically rich domain of social support theory in an applied clinical setting, it necessitated the use of passive observational techniques and instruments that categorize in nominal and ordinal data sets. Many of the shortcomings of these levels of data can be minimized through a sequential analysis. Sequential analysis as it is applied here is a classification and interpretation methodology that utilizes multiple forms of statistical analysis in a conceptually unified procedure in order to adequately test hypotheses. The use of statistical tests that are linked theoretically and pursued sequentially allows the investigator to build on the strengths of each technique while it maximizes the effectiveness of the classification of data, the measurement of performance, the selection of significant variables, and the ordering of relationships among variables that best fit the research questions and provide appropriate

tests of the null hypotheses. In this study, the sequential analysis procedures consisted of cluster analysis, stepwise discriminant analysis, and analysis of variance (ANOVA).

Cluster Analysis

Once chi-square analyses were completed, the next step in the analysis of the data was accomplished through the use of cluster analysis procedures. The decision to use cluster analysis was based on the parameters imposed by the research questions. The overarching purpose of the study was to describe possible relationships between social support provisions and the outcome measure of "adjustment to residential care" after six months. Since the subject pool consisted of a novel population for this type of inquiry (which attempted to describe various provisions and sources of social support), the characteristics of the group were not known. The use of a cluster analysis procedure allowed the characteristics of the sample of research subjects themselves to define the group and thus to derive classification rules for the data.

As a preliminary step, a dendrogram was created to offer a visual representation of the relationship between pairs of cases in the creation of a clustering solution (see Figure 1, p. 112). The dendrogram represents a "nearest neighbor" linkage which derives a single cluster from all cases. Figure 1 identifies the clusters being combined and the relative values of the weighted coefficients at each step of the solution.

Cluster and discriminant analysis both classify cases into categories. Cluster analysis attempts to identify homogeneous groups or clusters for cases where group membership is unknown (Norusis, 1994). Cluster analysis techniques are used "to define groups on the basis of the characteristics of the sample itself" (Duarte Silva & Stam, 1995, p. 280).

A K-means clustering algorithm was employed in this analysis. The K-means cluster analysis is a nonhierarchical clustering technique (Afifi & Clark, 1990). It was

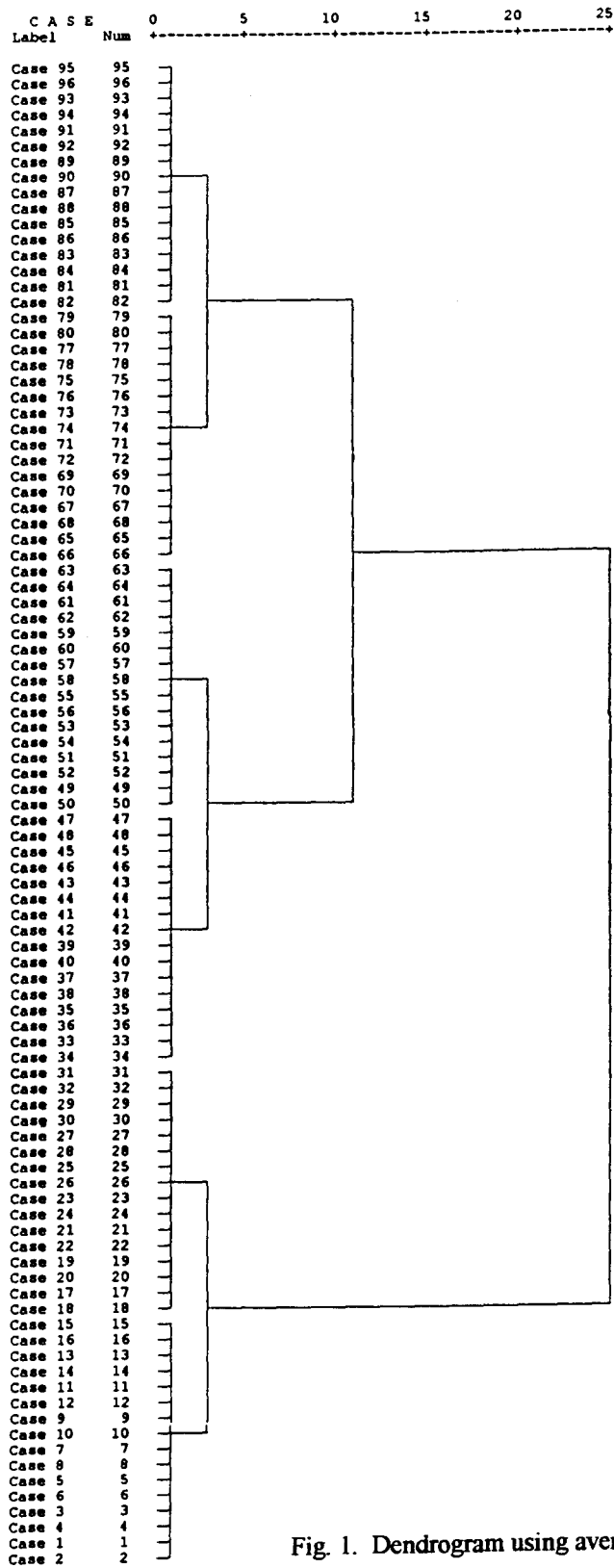


Fig. 1. Dendrogram using average linkage in a rescaled distance cluster.

used here to identify residents who had contrasting perceptions of the source, type, and strength of support across social support appraisal and social support behavior measures. The procedure followed for analyzing the data is consistent with the approach articulated by Engelman and Hartigan (1990). This is referred to as "nearest centroid sorting" (Anderberg, 1973; Norusis, 1994), wherein each case is assigned to the cluster with the smallest distance between that case and the center, or centroid, of the cluster. In this study, centroid sorting began with all the data being entered into a predetermined (K) number of initial clusters. For each analysis, the number of clusters in each algorithm is specified a priori by the investigator; in this study, two cluster, three cluster, four cluster, five cluster, and six cluster solutions were attempted. For each attempted solution, the cases were then repeatedly split by being iteratively reallocated into the cluster whose center was closest to that case (Afifi & Clark). The "center" of the cluster is defined here as the mean of the cases in a given cluster. This procedure was continued until all cases were allocated.

This procedure minimized within-cluster variance on criterion variables (social support appraisal and behavior scores) while maximizing differences between clusters. The choice of the K-means algorithm was based on two rationales. First, the criterion of minimizing within-cluster variance had the effect of contrasting cases not only on patterns of social support (the source of support from family or friends as well as the type of support provided), but also on differences in elevation (the strength of support) and direction (positive or negative support). Second, the K-means algorithm is sensitive to extreme responses and thus does not mask atypical patterns in order to achieve similarly sized groups.

Significant findings were found for the four cluster and six cluster solutions. The results of these analyses are summarized in Table 9 (Appendix O) for the four cluster and in Table 10 (Appendix P) for the six cluster solutions. An F-ratio value is reported in

both of these tables; this is actually an "F-like" ratio that indicates the relative importance of the variables in determining the cluster groups. The F-like ratio is not considered an actual test of significance because the process by which the clustering groups are formed in K-means analysis tends to inflate the between groups-to-within groups ratio from which the F-ratio is derived (Engelman & Hartigan, 1990).

For the four cluster solution, a repeated measures analysis of variance (ANOVA) with a six month outcome as the dependent measure was computed. Results are summarized in Table 11 (Appendix Q). They indicate that the variance between social support scores and adjustment at six months largely can be accounted for by membership in the four clusters (with a probability = .0002). Program membership (a case belonging either to the LSP or TLP residential programs) did not account for variance in outcome at six months (probability = .7436). The interaction of clusters and program membership together did not account for the variance in outcome at six months (probability = .5312). Because the variance accounted for by cluster membership was so significant, a descriptive summary of each cluster is pertinent in formulating conclusions about the research hypotheses.

Summary descriptions of the four clusters is found in Table 9 (Appendix O). The first group in the four cluster solution consisted of very high, positive perceptions of all social support provisions from both family and friends. This is termed the "strong ties" cluster because respondents rated support from all sources very strongly ("support from family" scores were over one standard deviation above the mean; "support from friends" scores were over one-half of a standard deviation above the mean). Although all subscales of "support from family" were higher than for subscales of "support from friends", the differences were not found to be statistically significant. The members of this cluster looked to their family for emotional support first, followed by material support provisions (practical assistance and financial support). They looked to friends for

material support first, followed by emotional support. This cluster consisted of 23 cases, of which 5 (or 21.74%) were still in the program six months later.

The second cluster can be termed the "weak family ties" cluster. Although their appraisals of support (SSA scores) from all sources were close to average ("support from friends" and "others" were close to the mean, while "support from family" was rated a half standard deviation below the mean), there was a clear difference between perceptions of support from friends versus family. The SSB subscales showed that, while "support from friends" was rated moderately low, "support from family" was rated significantly lower than average, more than a full standard deviation below the mean. As opposed to what was observed in the first cluster, every family subscale in the second cluster was rated lower than the subscales of support from friends. This cluster was comprised of 24 cases, of which 9 (37.49%) were still in the program six months later.

The third cluster was labelled the "weak ties with friends" cluster, because here the ratings of support from family were consistently ranked higher than support provisions from friends. Here all reported mean scores of "support from friends" fell around one standard deviation below the mean. Supportive behavior subscales (SSB) from family were rated higher than the mean. For this group, socializing with family and receiving advice from family were the highest rated support provisions. This cluster was composed of 17 cases, of which 4 (23.53%) were still in the program six months later.

The final cluster in the four cluster solution consisted of moderately strong (within one standard deviation of the mean) perceptions of support from both family and friends. Friends were rated slightly higher than family as a source of support (about one half a standard deviation above the mean for "support from friends" subscales as compared to "support from family" subscales that grouped at the mean). This group is called the "moderate ties" cluster because dependence on family and friends was found to be close to average across all subscales. The configuration of support from each source differed

somewhat, insofar as "socializing support" was the highest reported provision from friends, while "financial support" was rated highest from family. For both groups, these provisions were followed by "emotional support" and "advice and guidance". This cluster contained the highest percentage of successful adjustment cases among all four clusters. Of the 31 total cases in this cluster, 22 (70.97%) were still present in the program six months later.

A five cluster solution was attempted, but did not yield significant results. A repeated measures ANOVA with a six month outcome dependent measure yielded a one-tail probability slightly greater than .05 (five cluster probability = .0511).

The six cluster solution, however, yielded more robust results. A repeated measures ANOVA was computed for the six clusters with "six month outcome" as the dependent measure. The ANOVA results are summarized in Table 12 (Appendix R). They indicate that the variance between the social support scores and "outcome at six months" can largely be accounted for by membership in the six clusters (probability = .0093). Membership in either the LSP or TLP program did not account for the variance (probability = .2466); nor did the interaction of cluster and program membership (probability = .5431).

A summary of means and standard deviations for the six cluster solution is found in Table 10 (Appendix P). The first of these six clusters is referred to as the "strong ties" cluster. It consists of very high ratings (almost one standard deviation above the mean) of social support from all sources, although with family support provisions generally rated higher than those from friends. Among family support provisions, emotional support is perceived as most significant, followed by concrete, material provisions (practical assistance and financial support). Friends are seen as providing material provisions (practical assistance and financial support) first, then emotional support. This cluster

consists of 15 cases, of which only 2 (13.33%) were still in the program at six month follow-up.

The second cluster was identified as the "weak ties from family" cluster, because all supportive provisions from friends are rated higher than any of the family support provisions. All provisions from friends are well above the mean (ranging from a low mean score of 54.6 for "financial support from friends" to a high mean score of 57.7 for the SSA "appraisal of support from friends"). All provisions from family, however, are rated much lower, with all SSB subscales reporting mean scores around one and a half standard deviations below the mean and the SSA "appraisal of support from family" at only 42.5. Support from both family and friends follow a similar pattern in this cluster, with emotional and socializing support being rated highest. A total of 11 cases constituted this cluster, of which 3 (27.27%) were still in the program six months later.

The third cluster is called the "weak ties with friends" group because most provisions of support from friends fall below one standard deviation of the mean. Family support is more positively oriented, with all family scores falling above the mean. This cluster consists of a total of 12 cases, of which 4 (33.33%) were still in the program after six months.

The fourth and fifth clusters were almost mirror images of each other; that is, what was rated high in one cluster was rated low in the other. The fourth cluster is called the "personal provisions from friends" cluster, first because provisions of support from friends are rated higher than those from family, and because the highest provisions reported tend to be less descriptive of material support and more indicative of personal involvement. These high provisions from friends include "emotional support", "socializing support", and "advice and guidance". The support relied on from families was focused on material provisions ("financial support" and "practical assistance") to a greater extent than on the

family's personal provisions. The fourth cluster consisted of 22 total cases, of which 12 (54.54%) were in the program six months later.

The fifth cluster differed from the fourth in several respects. Whereas appraisals of support (SSA) were rated low in cluster four, they received the highest rating in cluster five. Whereas supportive provisions from friends were rated high in cluster four, supportive provisions from family were more significant in cluster five. Cluster five is called the "material support" cluster, because the highest family support scores consist of concrete provisions of support (financial and practical support) as well as the highest friends support score (financial support). With the exception of financial support, all other provisions of support from friends were rated lower than all family provisions, and were more than a standard deviation below the mean. A total of 18 cases were grouped in this cluster, of which 7 cases (38.88 %) were still in the program six months later.

The final group in the six cluster solution was labelled the "balanced moderate ties" cluster. It is called "moderate" because mean scores all fall within one standard deviation above the mean. It is labelled "balanced" because, unlike the other cluster groupings, neither family or friends support provisions predominate. Rather, the construction of the cluster is more subtly nuanced. The highest SSB subscale ratings are "emotional", "financial", and "advice/guidance" from family, while the lowest subscales reported are "emotional", "financial", and "advice/guidance" from friends. In between these two groupings are "practical assistance from family" and "socializing support from friends", followed by "practical assistance from friends" and "socializing support from family". Of all the groups in the six cluster solution, this group proved to be the cluster most strongly related to successful adjustment of residents. A total of 17 cases constitute this cluster, of which 12 (70.58 %) were still in the program after six months.

Discriminant Analysis

A discriminant analysis procedure was employed in this study to further classify cases into distinct groups and also to identify which variables contributed the most to making these classifications. Specifically, a stepwise discriminant analysis procedure was employed in the treatment of the data to expand on the analyses that preceded it. The chi-square analyses produced information about the relationship between specific variables and outcomes. Cluster analysis allowed more information to be gained as to the nature of the relationships among variables, including the strength of association, and the varying contributions of different patterns of social support in the creation of the cluster groups. Finally, discriminant analysis allowed predictor variables to be combined to create a “classification function” in order to further describe the groups to which each case belonged, and to permit conclusions to be drawn regarding the relative contribution of variables to that classification (Afifi & Clark, 1990).

The variables used in determining the linear classification functions were chosen in a stepwise manner. That is, at each step in the classification process the variable that adds the most to the separation of groups into distinct spheres was entered into the discriminant function (Jennrich & Sampson, 1990). The first variable selected in a stepwise process is the variable with the largest F ratio. This variable is entered into the equation first because it is the most potent in explaining variance. The second variable entered is the one with the second largest F ratio, a process that continues until all key variables are accounted for in the analysis.

To determine the strength of the discriminant function as representative of actual differences, a measure of goodness of fit procedure was employed in the analysis. The empirical method for determining the measure of goodness of fit consists of two steps (Afifi & Clark, 1990). First, the discriminant function was applied to the same samples

used for deriving it and the proportion incorrectly classified from each group was computed. The resulting proportions are reported here as "percentage of cases correctly classified" for each discriminant analysis solution.

Second, a cross-validation procedure was employed to provide support for the accuracy of the case classification. Because of the limitations inherent in this study due to the sample size, the cross-validation generally employed--utilizing split-sample techniques--was rejected in favor of a "jackknifed procedure" (Afifi & Clark, 1990). The jackknifed procedure does not split the sample; rather, it excludes one case at a time and repeatedly recalculates the discriminant function. That is, it excludes one observation from the first group and computes the discriminant function on the remaining observations; then the excluded observation is classified. This procedure is then repeated for every observation in the sample. The final proportion of misclassified cases produces a "jackknifed estimate". A jackknifed estimate is reported here for each discriminant function solution.

The stepwise discriminant function procedure in this study produced significant results for the four group and six group analyses. The discriminant function coefficients for the four group discriminant analysis are summarized in Table 13 (Appendix S). The percentage of cases correctly classified in the four group procedure was 93.7 %. Cross-validation using a jackknifed procedure produced a jackknifed estimate of 90.5 % of cases correctly classified. Given these results, the discriminant analysis could be interpreted with considerable confidence.

In the four group discriminant analysis, five variables were identified as the most salient. These included the "appraisal of support from family", "appraisal of support from friends", "emotional support from family", "emotional support from friends", and "socializing support from friends". Table 14 (Appendix T) provides a summary of the

standardized coefficients for these variables; their canonical ranking is reported in this table by ranking them by the magnitude of the coefficients.

The first of these groups is referred to as the "high sympathy" group. This group reported a high perception of emotional support from family (st. coeff. = 0.66573), and moderate emotional support from friends (st. coeff. = 0.43665), as well as a moderate, positive appraisal of support from family (st. coeff. = 0.36592). This group produced the only positive emotional support provision from either family or friends for any of the groups in the four group analysis.

The second group is referred to as the "low sympathy/ high activity" group. The members of this group reported very low emotional support from friends (st. coeff. = - 0.76184). In this respect, it is the opposite of the first group which identified positive emotional support as its defining feature. The expectation of group members is that friends do not provide strong, positive emotional support. Distinct from the other groups, these members reported relatively strong perceptions of socializing support from family members (st. coeff. = 0.59197). That is, it perceives that family members would be looked on to socialize with them in public. Also, much like the first group, it also reports moderate, positive appraisals of support from family (st. coeff. = 0.22044).

The third group can be summarized as a "high appraisals/ low activity" group. Their appraisals of both family and friends is higher than for either of the preceding groups (st. coeffs. = 0.68370 and 0.64942, respectively). However, perceptions of the various subscale types of supportive behavior are negative. Particularly, socializing with family members is perceived as something that provides little real support (st. coeff. = - 0.34575).

The stepwise discriminant procedure also produced significant results for the six group analysis. The discriminant function coefficients for six groups are summarized in Table 15 (Appendix U). Four variables were the most salient in distinguishing these

groupings. They are the "appraisal of support from others", "emotional support from family", "financial support from family", and "emotional support from friends". The percentage of cases correctly classified in the six group procedure was 86.3 %. The cross-validation analysis produced a jackknifed estimate of 75.8 % of the cases correctly classified. The classification produced four groups that were considered significant. Standardized coefficients for the variables for these four groups are reported in Table 16 (Appendix V) along with a canonical ranking based on the magnitude of the coefficients.

The first of these groups is referred to as the "positive support" group. Both emotional and material (financial) support from family is relatively robust (st. coeffs. = 0.57826 and 0.53253, respectively). Emotional support from friends is also perceived by group members as positive (st. coeff. = 0.33164). This group is confident of the family's sympathy ("emotional support") as well as its willingness to provide financial assistance. This group also rates favorably the ability of friends to provide emotional support.

The second group is referred to as the "high sympathy from friends" group. Its most characteristic feature is the strength of emotional support it perceives to be available from the peer group (st. coeff. = 0.87501). This stands in contrast to the expressed negative perception of (financial) assistance from family members (st. coeff. = - 0.29740). This group is also characterized by its moderate, positive appraisal of support those who are neither family or friends (st. coeff. = 0.28727).

The third group can be called the "strong support from others" group. It includes the highest coefficient ranking of any variable in the six group analysis, for the "appraisal of support from others" (st. coeff. = 0.92135). This strong expectation of support from those who are neither family or friends stands in sharp contrast to the weak, negative expectation of emotional support from friends (st. coeff. = - 0.36392) and the weak, if positive, perception of emotional support from family (st. coeff. = 0.23323).

The fourth group can be referred to as the "strong family ties" group. Its members rate the likelihood of financial support very negatively (st. coeff. = - 0.85100). At the same time, however, it rates the perception of emotional support from family very positively (st. coeff. = 0.83093), while it gives a mildly negative appraisal of support from others (st. coeff. = - 0.25377). This group is strongly oriented toward family as the frame of reference for social support, even as it perceives the lack of financial support as a loss. Its orientation toward others is only moderate, while its expectation of support from friends is weak.

Conclusions

The systematic examination of the data provided considerable support for rejecting all of the null hypotheses tested. Although all of the social support variables did not demonstrate equally significant results, enough of them were significant to challenge the hypothesis that there is no relationship between social support and adjustment to residential care.

First Null Hypothesis

The first null hypothesis stated that there is no relationship between subjective appraisals of social support and the outcome measures.

This hypothesis was clearly rejected. The chi-square analyses revealed that the relationship between "social support from others" and adjustment at six months was significant and would occur by chance less than .05 of the time. The results of a cluster analyses indicated that membership in clusters in both the four cluster and six cluster solutions were significant. Specifically, in the four cluster solution, membership in the "moderate ties" cluster, and in the six cluster solution, membership in the "personal provision from friends" and "balanced moderate ties" clusters were significantly related to

adjustment at six months (probability for the four cluster analysis of variance was 0.0002; for the six cluster analysis of variance, the probability was 0.0093).

Second Null Hypothesis

The second null hypothesis stated that there is no relationship between a specific mode of perceived supportive behavior and the predicted direction of the outcome measures.

This null hypothesis was also rejected. A cluster analysis of the data set revealed that three clusters were significantly related to successful outcome at six months (that is, residents still present in the program at six months). In the four cluster solution, 70.98 % of members in the "moderate ties" cluster remained in the program at six months. In the six cluster solution, 70.58 % of the members in the "balanced moderate ties" cluster were in the program at six months, while 54.54 % of the members of the "personal provisions from friends" cluster remained in the program at six months.

The four group discriminant analysis singled out five variables as most salient in defining group membership with adjustment at six months as the dependent variable; these included "SSA support from family", "SSA support from friends", "SSB emotional support from family", "SSB emotional support from friends", and "SSB socializing support from friends". The six group discriminant provided support for four significant subscale variables ("SSA support from others", "SSB emotional support from family", "SSB financial support from family", and "SSB emotional support from friends").

Third Null Hypothesis

The third null hypothesis stated that there is no relationship between the mode or source of social support and the phenomenon of premature departure from residential care.

This null hypothesis was also rejected. The cluster analyses revealed that seven of the cluster groupings were related to premature departure from residential care. In all seven clusters, less than 40 % of cases were still in the program after six months. The four cluster solution included the "strong ties" cluster (21.74 % remained in the program), the "weak family ties" cluster (37.49 %), and the weak ties with friends" cluster (23.53 %). The six cluster solution included the "strong ties" cluster (13.33 %), the "weak ties with family" cluster (27.27 %), the "weak ties with friends" cluster (33.33 %), and the "material support" cluster (38.88 %) who remained in residential care at six months.

Related to these findings, this investigation revealed differences between social support from family and support from friends.

Chi-square analyses revealed that several differences exist between the perception of support from family and from friends. When analyzing differences among cases with different parental structures, SSA "support from friends" was significant while support from family was not. Likewise, SSB "support from friends" subscales of "financial support", "practical assistance support", and "socializing support" were significant while those from family were not.

When cases were analyzed with the number of adults in the household accounted for, SSB "support from friends" subscales of "emotional support", "practical assistance support", "financial support", and "socializing support" were significant while support from family was not.

When the number of children in the household were considered in the analyses, SSB "practical assistance support" from family was significant while the subscales of support from friends were not.

When racial heritage was considered, chi-square analyses showed significant results for SSA family scores but not for friends. Several of the SSB "support from friends" subscales were found to be significant ("financial support", "practical assistance

support", and "socializing support") while none of the subscales for family achieved significance.

Most of the cluster groupings showed differences in structure between reliance on family for support and reliance on friends. Likewise, a series discriminant analyses applied to the data set indicated that there were differences between groupings of variables, with some reporting greater reliance on "family support" variables and others on "friends support". Some of the groups in the four and six group discriminant analyses reported negative values for support from family or friends.

CHAPTER V

DISCUSSION

This study was undertaken to test and build on the theoretical underpinnings first articulated by Cobb (1976) and most recently amplified by Vaux (1987, 1988). Cobb provided a definition of social support that encompasses information leading individuals to believe that they are cared for and loved, esteemed and valued, and that they belong to a network of communication and mutual obligation. For Cobb, supportive provisions consist of practical assistance, material services and information. Vaux refined Cobb's construct, specifically addressing shortcomings in the social support literature. Much social support research lacks theoretical clarity, involving poorly operationalized constructs, and the comparability of results across studies is often limited. Vaux's social support appraisals (SSA) and social support behaviors (SSB) scales were utilized in this investigation because they were designed to address the issues of theoretical clarity and adequately operationalized constructs, which was accomplished by breaking down the construct into multiple sources and types of support, and by focusing on perceived support as the salient factor in the definition of social provision. The overall focus in this study, on support provided by family and friends, is also consistent with the literature on the social world of the adolescent, which centers on these two groups as central to the adolescent's construction of supportive social provisions.

The choice of the population that was studied was based on two general goals: one, to provide at least a rudimentary map of perceived social support for a population

whose social support provisions had not been investigated utilizing such a nuanced definition of the construct in previous research; and, two, to test the limits of social support theory by extending that theory to a population not known for the strength of its social provisions. Much of the research on social support has been advanced utilizing community samples or samples of convenience (such as college undergraduates) that often fit the needs of the researcher in the academy, but whose findings have not revealed much regarding the structure and role of social support for a specialized population, such as the inner city adolescents from mostly socially deprived backgrounds, that make up this study. As a part of the larger literature on social support, this investigation fits into the growing number of studies that single out special populations in a variety of medical, clinical, and institutional contexts.

The study revealed that some social support variables are related to adjustment of adolescents to residential care, though not all the variables studied, and not all in the same way. The research hypotheses were crafted to focus on four phenomena. 1), was there a relationship between appraisals of social support and adjustment at six months; 2), was there a difference between social support from family and support from friends; 3), was there a relationship between the various types of support examined and adjustment to residential care; and, 4), was there a relationship between any of the social support variables and leaving the institution prior to six months, when the final outcome was measured. Overall, social support was found to be related to adjustment to residential care, although in a highly nuanced way. However, not all types of social support nor all providers of support were found to be related to adjustment for all residents.

The most significant finding was that the strength of support is, in itself, not consistently related to adjustment to residential care. In fact, very strong perceptions of support were related to premature withdrawal from the institution. Moderately strong, positive perceptions of support were, however, found to be significantly related to

adjustment at six months. This was particularly true when the support was balanced. That is, it was perceived to be coming from both family and friends. When support was perceived to be weak, or when it was seen to come significantly more from either family or friends instead of from both, the relationship to successful adjustment was not significant.

The systematic examination of the content of social support provision also produced significant findings. Although "socializing with friends" and "financial support from family" were associated with adjustment at six months, the most consistent type of support that was related to favorable outcomes was emotional support, both from family and friends. In both four group and six group discriminant analyses, emotional support was found to be the only significant supportive provision occurring from both family and friends.

Discussion of the Findings

Finding One: The "Moderate Ties" Phenomenon.

One of the most intriguing findings emerging from this study was the difference between the structure of social support provisions for those who were successful in adjusting to residential care and those who were not. In both the four cluster and six cluster solutions, one group emerged as strongly related to successful adjustment. In the four cluster solution this group was labeled the "moderate ties" grouping; in the six cluster solution, it was called the "balanced moderate ties" grouping. For descriptive purposes, it is specified here as the "moderate ties phenomenon".

These cluster groups stand in contrast to the groups in the four and six cluster solutions that failed to produce a high percentage of successfully adjusted cases. One type of failed grouping is characterized by weak ties to social support providers. This included all cases that reported low ratings of perceived support from family, from friends,

or from both. In the four cluster solution, this phenomenon is represented by two groups: the "weak family ties" cluster and the "weak ties with friends" cluster. In the six cluster solution, this is also represented by a "weak family ties" cluster and a "weak ties with friends" cluster, and, in a more restricted sense, by the "personal provision from friends" and the "material support" clusters. These results are classified here as a "weak ties phenomenon".

One other type of cluster grouping failed to produce a high percentage of successfully adjusted cases. In the four cluster solution, this grouping was labeled the "strong ties" cluster. In the six cluster solution, it was also represented by a "strong ties" cluster group. In spite of very high ratings of support across subscales and from both family and friends, these cluster groups did not include more than a handful of successful cases at the six month outcome measurement (21.7 % were successful in the four cluster strong ties group; 13.3 % were successful in the six cluster group). These results are classified here as the "strong ties" phenomenon. All three phenomena ("moderate ties", "weak ties" and "strong ties") require explanation.

Strong Ties

Much of the literature on social support assumes a "strong ties" hypothesis. That is, the more social support one receives or perceives to be available, the better able one is to deal successfully with stressors. This is also consistent with a common sense approach to the phenomenon, which can be summarized as follows: "if the absence of social support is bad, the presence of social support is good, and the presence of more social support is better". As early as Durkheim's articulation of a theory of egoistic suicide occurring as a result of insufficient social ties (Durkheim, 1897/1951), the connection between strong social support and adaptation has been advanced repeatedly in theoretical formulations and empirical studies that permeate the social support literature. One of the earliest

theorists to advance this view was Cassel (1974), who asserted that the strength of group supports provides protection against specific physiological and psychological effects. Mitchell and Trickett (1980) likewise proposed that the strength of social ties is a salient factor in defining social networks. Lin and associates (1985) have defined social resources in terms of an individual's access to and use of strong social ties (Lin et al., 1985).

Some social support theorists have described "strong ties" by counting the number of social connections a person has (Brownell & Shumaker, 1984). Likewise, Cohen and Willis (1985) have concluded from their research into the beneficial effects of social support that main, or generalized beneficial effects are related to the size of the social network, since larger social networks are more consistent in providing support than are small networks. In this formulation, the more social provisions that are available, the stronger the main effect of support will be.

Supporters of the buffering effect of social support have long considered the strength of social ties to be a central component of the buffering phenomenon. Thoits (1982) defined the buffering effect largely by examining the strength of social supports. She stated that those with fewer or no social supports are more likely to be vulnerable to specific stressors. Heller and Swindle (1983) theorized that buffering occurs in the presence of strong social support and that symptoms will have a greater likelihood of developing when social support is weaker.

Weak Ties

Many social scientists have explored the weak ties phenomenon. This has been described by some in terms of particular deficiencies in the social network, including having a small number of family, friends, and social contacts (Brugha et al., 1982). Some have suggested that the absence of social support is a strong predictor of psychiatric

symptoms (Lin, et al., 1979) and affective disorders (Brugha et al., 1982).

Epidemiological researchers have reported a strong connection between physical symptoms and social marginality (Pilisuk, 1982). This is consistent with one of the early social support theorists, who postulated that increased susceptibility to disease tends to occur in social environments in which social disorganization or the disruption of social connections occurs (Cassel, 1974). Others have explored the phenomenon of loneliness in adolescents and have reported that the presence of weak social ties is related to such outcomes as increased psychological symptoms and lower life satisfaction (Moore & Schultz, 1983). The presence of depression in adolescents has likewise been associated with fewer social resources (Daniels & Moos, 1990).

An important distinction needs to be made concerning the weak ties phenomenon. Weak ties, as understood in this study, concerns the relative strength of social support as provided by family and friends; it is measured by assessing the perception of support available from these sources. The term "weak ties" has also been applied to the study of other, peripheral sources of support in the broader network of social connections available to the individual beyond family and friends. Although related to the field of social support theory and research as examined within the context of this dissertation research project, the literature on these weaker sources of support has emerged as a specialized area of inquiry which attaches a distinct, different meaning to the term "weak ties" than is understood here as the mere absence of social resources.

In his theory of peripheral sources of support, Granovetter (1973) described the strength of social ties as a combination of the amount of time, emotional intensity, mutual trusting exchanges made, and reciprocal services provided. For Granovetter, weak social ties are not synonymous with the idea of social ties that are not strong. Rather, he sees them as a distinct phenomenon in the construction of a social network which play a unique role in the process of social cohesion. On the individual level, weak social ties are

not simply deficient social provisions; they are, instead, by their nature less involved, less intense, and less dense than what normally is conceived of as social support. These encompass many social relationships, casual work or school relationships, and informal acquaintances such as a neighbor or grocer. On the level of social organization and macro networks, Granovetter sees weak ties as providing cohesion in communities in ways that strong ties do not, by providing a bridge between the individual and the larger society, addressing the necessity for social interactions and discourse without involving more intimate, stronger ties between those involved.

In summarizing the literature on peripheral sources of support, Adelman and associates (Adelman et al., 1987) have described the phenomenon of weak ties in a way that is consistent with Granovetter's conceptualization. They define weak ties as "the wide range of potential supporters who lie beyond the primary network of family and friends" (p. 126). They assert that less highly developed, weak ties relationships are also capable of providing support, especially during periods when strong ties are disrupted, and for those who lack social or cognitive skills that strong ties demand. They describe weak ties as limited relationships, whose limitations are characterized by three features. First, they demand lower levels of intimacy, variety, and interdependence than strong ties do. Second, they are not familiar with other elements of the individual's social network and do not normally interact within the larger social network of the individual. Third, weak ties occur within a restricted range of contexts, often limited to one type of interaction that tends to be limited in time; no ongoing relationship is assumed in weak ties. Adelman and associates describe four supportive functions as distinctive of weak ties relationships: that they extend access to information, goods, and services; that they allow comparisons with dissimilar others; that they facilitate low-risk interactions; and that they foster a sense of community in the broader social milieu.

The weak ties phenomenon that emerges in this study did not involve the loose network ties of everyday social interaction described by some as "weak ties" in the literature, although they might more precisely be labeled as "peripheral sources of support". Rather, what was examined here is what the weak ties theorists would describe as intimate social connections with family and friends. The weakness of these intimate ties lies in the perception of weak support or no support from peers or family members, or both.

What makes a source of support from family or friends weak, as evidenced in the findings here, is the presence of an obvious gap between the strength of support perceived from one source or the other, with the weaker support generally falling more than a standard deviation below the mean.

In the four cluster solution, the "weak family ties" and "weak ties with friends" clusters demonstrated this pattern. In the "weak family ties" cluster, all subscale scores for family and friends fell below the mean. Clearly, support from any source was perceived to be weaker here than for any other group. However, while support from friends was perceived to be moderately weak (falling less than a standard deviation below the mean), support from family was perceived to be very weak. In the "weak ties with friends" cluster, support from family subscale scores all fell above the mean; that is, support from family members was perceived to be relatively strong. Support from friends scores, however, fell at least one standard deviation below the mean; there was an obvious gap between how family and friends were perceived to be supportive.

This pattern was even clearer in the six cluster groupings. The "weak family ties" cluster produced scores for support from friends consistently above the mean, while support from family scores fell around one and a half standard deviations below the mean. The six cluster solution also produced partial support for a weak ties interpretation, although in a more restricted sense, in two other groups: the "personal provisions from

friends" and the "material support" clusters. The "personal provision from friends" cluster provides limited support for the weak ties hypothesis because it yielded consistently higher ratings of support from friends than from family. All "support from friends" subscales yielded scores slightly higher than the mean (with a mean of 50.00, SSB "support from friends" scores ranged from a high of 52.67 to a low of 51.05), while all family support subscale scores fell at or slightly below the mean (with average scores ranging from a high of 50.07 to a low of 47.81).

The "material support" cluster produced scores that were weak for both family and friends, with all scores falling around one standard deviation or more below the mean. Even though family support was perceived as slightly stronger, this cluster produced the weakest overall perceptions of support for any group. Although not consistent with the pattern of the other weak ties groups (with either family or friends perceived as significantly stronger than the other in the perception of support), because all support was perceived as weak for this group's members, it fits into a weak ties classification.

None of the weak ties clusters included more than a moderate number of cases that adjusted to residential care at six months, and in most instances, the successful adjustment rate was poor. This suggests that two phenomena are occurring. First, when support is perceived to be weak or not available, adjustment in the face of a stressful stimulus is less likely. This is consistent with much of the literature on social support, and especially with those who espouse either the main effect or buffering effect hypotheses of social support. Second, when social support is absent from one of its central providers, family members or the peer group, then adjustment in the face of a stressful stimulus becomes more problematic. Support from only one source, even if that support is perceived to be above average, does not seem to be consistent with adjustment to residential care.

That weak ties are associated with unsuccessful adjustment is consistent with other findings in the literature. Weak ties do not seem to allow social support to act as an

effective buffer against negative outcomes. In psychiatric populations, the absence of social support has been seen to be a predictor of psychiatric symptoms (Lin et al., 1979). Epidemiological studies have found a connection between breakdowns in health and social marginality (Pilisuk, 1982). Those with minor affective disorders have been found to have deficient social networks (Brugha, et al., 1982). This is consistent with the findings in the current study that indicated that when support is weak, it is often associated with negative outcomes.

Moderate Ties

The final type of response pattern among respondents includes the "moderate ties" group from the four cluster solution and the "balanced moderate ties" group from the six cluster solution. These groups produced scores close to or above average from both family and friends, but with no excessively high scores (most scores fell around half a standard deviation above the mean). These two groups also produced, by far, the highest number of cases making good adjustments to residential care, with more than two-thirds of the group members remaining in the program six months later.

The groups are configured somewhat differently. The "moderate ties" group follows the pattern of both the strong ties and most weak ties groups, insofar as one source of support is consistently perceived as being more supportive than the other. In the case of the moderate ties group, "support from friends" subscale scores are around half a standard deviation above the mean, while the "support from family" scores are right around the mean. By contrast, the "balanced moderate ties" group had scores from both family and friends around half a standard deviation above the mean, with most family support scores being only slightly higher than perceptions of support from friends.

What the data represent in this study is a clear relationship between moderate, positively perceived support that is strongly associated with adjustment to residential care.

Weak ties fail to provide either the strength of support or the number of sources of support conducive to dealing with stress related to adjustment to residential care. It should be noted that this finding is predictable from much of the social support literature.

What is less predictable from the literature, however, is what happens when participants' perceptions of support are not just moderate, but very strong.

There are several studies that support a strong ties connection between social support and favorable outcomes. Such an approach is consistent with researchers such as Thoits (1982) who asserted that those with a strong social support system are better able to cope with life changes while those lacking support are vulnerable to undesirable effects, and Heller and Swindle (1983) who concluded strong social ties are able to protect individuals from developing symptoms associated with stress.

However, the results of this study do not support a "very strong ties" hypothesis as much as a moderate or "good enough support" explanation. In the groups that reported very strong ties, but who were not strongly associated with successful adjustment, one of three things may be occurring. First, when attachment is very strong within a supportive context (such as with family or friends) and that context is altered substantially, such as by moving an adolescent out of a familiar environment where family and friends are readily accessible into a strange or novel one, the perception of loss of support or distance from support may overwhelm any positive benefit attached to the supportive network. This explanation would be consistent with the theory of Lin and associates who define the strength of social support partly in terms of access to and the use of what they call "strong and homophilious ties" (Lin et al., 1985, p. 249).

Second, the triggering of support may depend on more consistent access to the sources of support than the residential care environment might allow. This may well be a more severe problem for the kind of population from which this study's sample was derived, which includes family and friends who themselves may lack the financial,

practical, or social resources (e.g., car, telephone, money to travel to visit the adolescent) needed to maintain the expected high level of support.

Third, social networks tend to be reciprocal; systems theory is based on the belief that there is an essential interrelatedness among members of a social system. Even as some adolescents may assess support from friends or family to be very strong, so too, their family members and friends may rely on the adolescent's own active participation in the supportive network. When an adolescent is making the transition into residential care, the nature or strength of support available, or the perception of its availability, may be altered. This is consistent with the findings of Kahn and Antonucci (1980) who described the structure of social support in terms of a cohort or reciprocal reference group, which includes those who rely on the individual for support as well as those who act as a support for the individual. When the adolescent is removed from the very strong social network, it can trigger a fluctuation in the systemic homeostasis that causes the entire system to act to correct the systemic imbalance.

Instead of providing support, the very strong support system may actually act to sabotage the adolescent's adjustment to the institution. In a summary of the literature on weak ties, Adelman and associates suggest that strong ties may be suffocating. They propose that the acquisition of a new social identity may be undermined by very strong social ties that act to retard change and innovation (Adelman et al., 1987). Thomson and Vaux (1986) reported that the effects of stress on the family system are greater for parents than for adolescent members and are more pronounced for enmeshed than for disengaged families. It is reasonable to assume that enmeshed family members tend to over-identify with the family as their salient reference group. Consistent with both the weak ties and the very strong ties clusters' inability to produce many successful members is the finding of Shulman and associates who state that adolescents who perceive a lack of family support or who report an over-controlling family, tend to demonstrate higher levels of

dysfunctional coping (Shulman et al., 1987). Levinger (1979) has described a limitation of very strong ties in terms of barrier forces that strong ties networks can create that inhibit the individual's freedom to act independent of the network.

What the data seem to indicate in the present study is the possibility of a kind of perceived social support that is "good enough". That is, when social support is positive and balanced from both family and friends it finds its strongest association with positive outcomes. The results suggest that, when the perception of support from family or friends is very high (e.g., a standard deviation or more above the mean), any limits imposed on access to the sources of social support may be unacceptable to the adolescent. It also suggests the possibility that, in a deprived environment such as the one from which the study sample was drawn, in which a stable family structure, or nurturance, or money, or healthy diversions, or more adaptive outlets for peer group activity common to the middle class is largely absent, the perception of support, when removed from the actual provision of support, may prove insufficient as a mediator of stress when challenged by the rigorous demands that a move into residential care places on the support network as well as on the adolescent-resident.

It also suggests the possibility that a kind of social deprivation, experienced within the individual, may be the salient factor in adaptation. Consistent with Bowlby's theory of attachment (Bowlby, 1969), an insufficiently developed individual will present in ways that are consistent with the results in this study. Some will develop emotionally but with an inadequate ability to form mature attachments with others. These individuals will form attachments with others that are superficial and unsatisfying. This is consistent with the profile of the "weak ties" groups, who generally rated support from all sources low, and support from either family or friends (or both) seriously deficient. Others will have an attachment deficiency, but will tend to over-identify with, over-invest in, or over-rate the ability of others to provide for their attachment needs. These individuals often have

difficulty with respect to forming attachment relationships that are appropriate, consistent, and mutual. This pattern is consistent with the groups in this study who rated support very highly but who failed to adjust successfully to residential care. If the social support literature is accurate (i.e., that greater social support is positively related to dealing with stress), then for the deficiently attached adolescent, the perception of support may be seriously flawed, overly optimistic, or disconnected from the actual ability of the network to respond in ways conducive to adjustment.

Beyond the sources of support examined in this study, there are several alternative hypotheses that might be related to outcomes. First among these is the milieu of the residential institution itself. For many, the stability and predictability of the milieu works, along with the consistent monitoring of relationships while in the institution, to provide a qualitatively different experience of support from adults and peers that may be unprecedented in the life of the troubled adolescent, a life that can be less structured, consistent, and/or caring outside the milieu. Second, for most residents, consistent attendance in school provides yet another enriched social environment that allows for the development of stable, supportive relationships for adolescents in general. Finally, there can be a reverse kind of reaction to social support at work, insofar as highly perceptive or sensitive adolescents may adjust to residential care, not because of the social support they receive from family or friends, but precisely because they recognize that family or friends (or both) are deficient or only capable of negative support, and so they adjust to the institution because it represents an opportunity to free themselves from a destructive home life. None of these hypotheses, however, were supported by the data.

The first alternative hypothesis, that the milieu itself creates the support necessary for adjustment, is not supported in the study. Although assigned to one of two programs, all those involved in the study were exposed to the same milieu, the same structure, the same staff, and the same peer group. Some were successful; others were not. The

analyses of variance results indicated that there was no significant variance attributable to the program to which each case was assigned.

The second alternative hypothesis, that a consistent involvement in the school environment was the salient factor contributing to successful adjustment was not borne out in the study. As a requirement of the program, all residents were required to attend school; close monitoring was provided. One of the outcome measures was "truancy", which was not found to be related either to successful adjustment or early withdrawal from the program.

Finally, finding a connection between negative family or peer support and adjustment to residential care in order to escape a deficient environment at home also proved elusive. Two findings argue against such a hypothesis. First, if it were supported by the data, one would expect to find a higher percentage of residents who reported weak ties to adjust to the institution; this did not occur. Second, such an "escapist" orientation is not supported by those groups which did have a high percentage of successfully adjusted cases, these groups reported positive support from both family and friends.

Finding Two: The Role of Emotional Support

One of Cobb's (1976) major contributions to social support theory was his conceptualization of the role of social support in buffering against the deleterious effects of life stressors. Cobb recognized that social support was a part of human development throughout the life cycle and that it acts to facilitate the process of adaptation to change and the ability of the individual to manage crises. His theory refined the definition of social support to include three classes of supportive provision: information leading an individual to believe that he is cared for and loved, that he is esteemed and valued, and that he belongs to a network of communication and mutual obligation. The primacy of emotional support in these provisions was clear to Cobb ("cared for", "loved",

"esteemed", "valued"). The results of the current study support Cobb's insight into the place of emotional provision in the process of social support.

Cobb made a distinction between behaviors or activities that demonstrate support and information or emotional exchanges that express support. The former, which he labeled "material" provisions, include giving and receiving goods and services as well as concrete assistance; the latter, which Cobb saw as the communication of, or information about, the availability of support include non-tangible provisions of support. Both were tested for in the current investigation, and elements of both were perceived as important to the adolescent respondents. The discriminant analyses of the data set revealed three types of supportive provisions as most important in discriminating among group membership (emotional support, socializing support, and financial support). The first falls within Cobb's category of communication of support (emotional support includes the perception of being comforted, listened to, understood, cared about, and sympathized with); the second and third represent Cobb's category of material provisions (socializing support includes going places with, spending time with, and otherwise being part of the social network activities of the respondent; financial support includes such activities as lending money or forgiving debts). Both socializing and financial support were found to be significant when it came from family members. Emotional support takes on added importance because, in both the four and six group discriminant analyses, it was the only type of support that was found to be significant when it came from both family and friends.

The analysis of the data revealed that emotional support was not only significant as a positive provision; it was also evident in some groups in deficit terms, as a weak provision. That is, when emotional support was perceived to be the highest need, those respondents were less likely to adapt to residential care.

Emotional support is an intriguing element of the social construction of disturbed adolescents such as those in this study. At face value, it would not seem that adolescent males in general, let alone those from social backgrounds that include poverty, crime, and life in the streets, would place a high value on emotional provisions. The common view of life for urban adolescents might even suggest that the mere admission of emotional need is a sign of weakness. However, the literature suggests a growing appreciation for the importance of emotional support in adaptation. In earlier theory, Bowlby (1969) articulated the importance of emotion in the process of adaptation. For Bowlby, the communicative role of feeling and emotion was an important component of healthy development, particularly with those central to an individual's life, such as family members. House (1981) defines social support, in large part, as the expression of emotional concern, such as showing signs of loving, liking, or being empathic toward an individual. Recent publications have continued to advance theoretical formulations that describe the central role of emotions in social development and adaptation (Goleman, 1995; Salovey & Mayer, 1990). These are consistent with the findings in this study, that identify the perception of emotional support from both family and friends as a salient feature of social support during adaptation to residential care.

Adelman and associates have studied the role of emotional support for adolescents. They reported that friends provide the primary source of support during the teenage years (Adelman et al., 1987). This conclusion, however, was not supported in the findings reported here. In the current study, which identified emotional support from both family and friends was found to be important for adolescents, and the lack of emotional support from either one or the other was associated with early withdrawal from residential care. Eggert's (1987) conclusions about the content of family support was not totally supported by the findings in the current study. She contended that most family support occurs through communication, but some material provision, such as financial support, was rated

higher than advice and guidance in the groups associated with successful adjustment in this study.

It is instructive, as well, to consider the types of social support that were examined but were not found to be significant determinants of group membership. These include "practical assistance support" and "advice and guidance". The domains each represent suggest why these were not significant provisions for this population. The SSB descriptors of "advice and guidance" include behaviors such as family or friends making suggestions, giving advice, telling the adolescent what to do, and telling the best way to accomplish a task. General adolescent resistance to being told what to do may account for much of the reluctance of respondents to rate this behavior highly; further, it may reflect limitations in the social network in problem-solving behaviors or limitations in the social milieu to address individuals' problems as group issues.

Practical assistance support includes elements such as offering a ride, loaning a car or tools, demonstrating skills, and helping make arrangements to assist the individual. As in the area of advice and guidance, the inability of practical assistance support to discriminate among groups may indicate shortcomings in the willingness of respondents to tap this domain or even to recognize available provisions as being supportive, or it may indicate shortcomings inherent in the social network itself. The social network of inner city youth is limited in the variety and richness of practical provisions available to it; cars and tools may be in short supply; desired skills may be lacking. The adolescent may also be insensitive or resistant to available resources. The lack of significance associated with practical assistance and advice and guidance may not only indicate characteristics of the social support experience as perceived by the adolescent in relation to his family and friends, but it may also suggest limitations associated with a deprived social environment where factors such as poverty or the lack of skills-training might limit the adolescent's expectations of social support provisions.

Finding Three: Mutual Sources of Support

Vaux's (1985) conceptualization of social support as a metaconstruct includes three components (supportive resources, behaviors, and appraisals). Resources involve the size of the support network; behaviors include the content of support, the types of support an individual perceives; appraisals include the judgments an individual makes about the availability, source, strength, and helpfulness of support. A series of discriminant analyses performed on the data sets in the present study revealed that appraisals of support from both family and friends were important in the subjects' construction of their supportive world. This was particularly true in the four group analyses. This finding indicated that appraisals of support from family and friends were significant variables in discriminating among group memberships.

In the six group discriminant analysis, the appraisal of support from "others" provided an alternative discriminating function. The inclusion of an appraisal of "support from others" was incorporated into the study because it reflects the general nature of supportive networks, insofar as they are most often not limited to only family and friends. This is particularly true of the social world of adolescents, that includes teachers, coaches, classmates and others. Including a category of appraisals of "support from others" also provided the possibility of an alternative explanation for phenomena. However, although present as a significant discriminating variable in the six group discriminant analysis, "support from others" did not replace or usurp the primacy of supportive provisions from family or friends; it was a significant discriminating variable in three of the groups, but only along with other variables representing emotional and financial support from family and friends. Also, unlike appraisals of support from family and friends which were always positively perceived, "support from others" was sometimes seen as weak by respondents.

The residents who adapted successfully to residential care tended to perceive support favorably from both family and friends. Those who relied on only one or the other, or who found support from either family or friends (or both) to be weak tended to leave the program prior to the six month outcome. This is consistent with the findings of Sabatelli and Anderson (1991), who see parents and peers as complementary and not mutually exclusive sources of support for the adolescent, and that severed or weak ties with one or the other can act to hinder adjustment for the adolescent. In part, Sabatelli argues, this is because the most basic questions of identity and belonging are explored in the dual worlds of family and friends. For Sabatelli, peer support tends to be more allied to specific situations, such as the use of leisure time, while parents are more influential regarding advice and long-term guidance. This is consistent with those who were successful in adjusting to residential care in the six cluster "balanced moderate ties" group; they rated advice and guidance from family higher than from friends, while rating socializing with friends higher than with family.

There is evidence in the literature (Froland et al., 1979) that support from only one source may be related to poor adjustment; in Froland's study, support only from friends was related to poor adjustment. The lack of support either from parents or friends has also been associated with the development of psychosomatic symptoms during stressful life events for adolescents (Aro et al., 1989).

The results of the current study are consistent with the literature that suggests that the social network of adolescents changes over time (Cairns et al., 1985; Garbarino et al., 1978; Montemayor & Van Komen, 1985) and, especially, that even as that social world expands to include peers in a more central way, that friends do not usurp the role of family, but complement it (Blyth et al., 1982; Brown et al., 1986; Hunter, 1985; Hunter & Youniss, 1982). This is an important finding in the current study, that supports the theory that the construction of the social world of the adolescent does not move from an

intrafamilial to an extrafamilial locus, but rather that it expands to include both friends and family in a broader constructed network.

Even with the special population represented in the current study, family and friends together are most strongly associated with adjustment to residential care, and, conversely, the absence of positive, perceived support from either family or friends is associated with premature departure from residential care. This is noteworthy when one considers the deprived social environment from which subjects derived. For many of them, family support might be judged by a casual observer to be less than ideal, both because of the construction of the family (that includes a large percentage of single parents when compared to the general population) and its inability to provide much material provision (due to the economic deprivation of many of the subjects' families). This study does not support the finding of Bird and Harris (1990) that adolescents in single-parent homes tend to utilize family support less often than adolescents from two parent homes, but it does support Friedmann and Andrews (1990) who found no differences between children cared for in one or two parent homes. Further, the provision of support from friends might also be perceived by the casual observer to be deficient (and sometimes delinquent and a negative influence on the subjects). This study supports the conclusion (Sarason, Sarason, & Pierce, 1990) that subjective perceptions of support are most salient in gauging the social support construct, and that even when, from an objective standpoint, an adolescent's support network might be viewed as deficient, as long as that support is perceived to be positive by the adolescent, and when it is perceived to be available from both family and friends, adjustment to residential care is enhanced.

Limitations of the Study

The nature of research in the social sciences is that the phenomena investigated typically are complex, multifaceted, and open to a variety of interpretations. Because of

this, the way in which a study is designed and controlled is fundamental to the accurate articulation of theory, construction of appropriate tests of hypotheses, and the accurate interpretation of data. Decisions involved in the process of research design and interpretation include at least three types of limitations (those related to experimental control, statistical control, and the interpretation and application of results).

Limitations Related to the Use of a Passive Observational Methodology

Much of this paper has been devoted to providing adequate experimental control. This includes the theoretical foundations, the formulation of constructs, and validity and reliability information concerning the instruments employed. There are however, several limitations that apply to passive observational research in general, and those that accrue to this particular study that should be articulated.

The choice in designing the present study included a realization that, in order to investigate a target population underrepresented in the social support literature, a passive observational model would have to be employed. The ideal structure with which to achieve true scientific rigor involves experimental and, in some cases, quasi-experimental designs, which relies on random sampling of groups representative of target populations. Field research, however, rarely allows for random sampling, which presents a serious challenge to the need for external validity. Cook and Campbell have suggested that this limitation is more apparent than real, and that external validity may actually be enhanced more by a number of smaller studies that may lack randomness than by a single study with representative samples (Cook & Campbell, 1979). The limitation resulting from this choice, however, is that the generalization of results to other target populations is severely restricted. This limitation of application of the results of this study to this population alone is offset, however, by the nature of the social support literature, which includes several thousand published studies incorporating a variety of target populations and

conditions. This study does not stand alone, but joins the larger field of social support research. As such, it meets the condition articulated by Cook and Campbell that field studies, when taken together, create a stronger argument for external validity than a single, more rigorously designed, random sampling.

There is a related ethical argument in favor of a passive observational research design, insofar as the domain being studied involved the measurement of something as fundamental to the subject's psychological well-being as "support from family". Experimental manipulation of a population of adolescents at risk who are referred for institutional placement by randomly assigning them into treatment/no treatment groups, or even assigning different levels of treatment by the researcher was not ethically justifiable. Other research designs (that would allow random assignment into levels of treatment) would fail to assess the domain of interest, that is, actual perceived support in the lives of adolescents and its relationship to real life adjustment.

A final limitation related to a passive observational methodology is, perhaps, the most obvious: interpreting what occurs depends on what one chooses to observe or ignore. Factors such as the personality characteristics, socialization style, and psychological symptomology of the participants were not evaluated. Their exclusion was a function of the research design, inasmuch as a prohibitively large number of subjects would be necessary to adequately represent these broad categories of variables.

Even though not directly related to the theory being tested, these variables present possible alternative explanations for the phenomena observed. However, the research design that was created for this study did include the relevant variables necessary to test the underlying social support theory, and the results provided an explanation for the observed phenomena that was both consistent with theory and supported by statistical analysis. That is, this study was inclusive of the essential variables, but not exhaustive.

Limitations Related to the Operationalization of the Construct

In selecting a methodology, issues of construct validity arise. The way constructs are operationally defined needs to fit the theory to be tested and represent the essential elements of the domain of interest. The elements of the social support construct tapped by Vaux's instruments (The Social Support Appraisals and Behaviors Scales) accurately represent the essential dimensions of the social support construct as articulated by Cobb and others. These elements consist of concrete provisions (including practical assistance and financial support) and personal provisions (advice/guidance, emotional support, and socializing support).

A strong argument can be made in favor of the elements included in Vaux's social support scales as inclusive of the essential elements of the construct without being exhaustive. By limiting the construct to five discrete types of social support, Vaux's instruments reduce the chance of confounding the variables with each other. Finally, an argument can be made in favor of essentiality over exhaustiveness because of the problem that arises when multiple variables are included solely for the sake of exhaustiveness; their presence tends to highly inflate the possibility of Type I error occurring (Licht, 1995).

Limitations Deriving from the Method Used in Data Gathering

While there was no evidence of response sets uncovered in the examination of social support protocols for the SSA, one example of a response set was discovered for the SSB protocols. This was deleted from the analysis and interpretation of the data.

In addition, a few respondents were observed to have rated either family or friends in a fairly uniform way, either mostly high or low. These responses contrasted with their other responses, which were more nuanced and included high, moderate, and low ratings. The total number of these types of respondents was very low ($n=3$) and was not considered a serious enough threat to skew the results by artificially inflating or deflating

either the family or friends responses. The rationale for including these responses in the data analysis was threefold. First, the fact that some respondents would rate one group much higher or lower than another falls within the parameters of the actual choices provided on the questionnaires. Second, consistently high or low ratings directed toward one group do convey valuable information about attitudes and perceptions of that group; moreover, they do not stand alone, but are part of a larger set of responses that convey, in this larger context, a perception of relative merit of support by family in relationship to friends that the investigation was attempting to explore. Finally, a lack of nuance in perception directed either at family or friends is not inconsistent with an adolescent worldview, and was, in fact, predictable.

Limitations Related to the Interpretation of Results

The lack of a randomized sample and levels of treatment and controls presented perhaps the most serious limitation in interpreting the results. Foremost, it limited the generalizability of results either to other target groups or across populations.

To limit the possibility of a skewed sample (for instance, representative more of the overly compliant or exhibitionistic instead of the actual population), attempts were made to enhance the participation of as many of the population as possible. This consisted of a thorough explanation to potential participants of their part in the study prior to eliciting their participation. This included assurances of anonymity of the information gathered, the timing of their participation to the early stage of their residency in the institution before attitudes toward compliance were confounded with their feelings toward the institution, and normalizing participation to conform with other routine tasks in which they engaged in the institution. In sum, almost all new residents participated in the study.

Factors other than social support, particularly the experience of the institutional milieu itself, had to be considered as an unmeasured variable that might be confounded

with the effect of social support that was measured. That is, social factors such as life in a monitored, rule-governed milieu or consistent attendance in school might actually have influenced adjustment far more than social support. It is recognized that other factors related to social support that were not assessed, such as the influence of staff relationships with residents or the guidance of a new teacher or even being part of a healthier peer environment in school might have influenced the results of the investigation.

This was offset by the design of the study, so that the timing of the measurement of social support would occur before meaningful relationships could be established in the institution or new school, thus limiting their effect on respondents' reports of perceived social support.

This is consistent with the intention of this study, whose domain of interest involved the provisions of social support by the family and peer group which existed prior to institutional placement. These constituted a social network subjectively established by each participant that, because it was free of influence by the institution or researcher, provided a map of social provisions that might differ significantly from one influenced by socialization cues given by the institution, as well as by the individual's own socialization choices after he had lived in the institutional milieu.

Limitations Related to the Data Analysis

The limitations imposed on statistical analysis in this study were complicated by three concerns. First, the kinds of data generated with the instruments available were limited to nominal and ordinal fields. Second, the sample size, although adequate, was not large ($N = 96$). Third, the most appropriate statistics used to test the null hypotheses have inherent limitations.

Although useful inferences can be drawn from nominal and ordinal data fields, there are obvious limits to the extent of those inferences. Nominal data (such as

numerical counts of cases by racial background) produced information helpful for describing the sample from the population, but were only peripherally related to the research questions themselves. Ordinal data allow for comparative rankings of data within each case. These subjective rankings of the relative strength of support from family and friends, and among different types of support, was central to this study which focused directly on perceived social support, and, as has been described earlier, such subjective perceptions are perhaps most relevant to the measurement of the social support construct.

The size of the sample from the population created its own limitations. In the statistical analysis, this was seen most vividly in the kinds of chi-square analyses that were possible. Although limiting categories of treatment or variables to a small number of cells was theoretically and statistically defensible, insofar as it allowed valid classifications of cases to be maintained and valid conclusions to be drawn, it also limited the number of degrees of freedom in the resulting analysis.

The statistical procedures employed also have inherent limitations. Chi-square analysis, for instance, is an appropriate statistic to address questions about the presence or absence of a relationship between (among) variables. However, it does not permit inferences to be drawn about the strength or direction of such relationships. One response to this concern was to include measures such as the Goodman-Kruskal gamma statistic, to clarify the direction of association. Another response to this concern was to employ a sequential analysis procedure, which clarified the relative contribution of each variable to various outcomes.

Beyond the limitations on statistical analysis imposed by the instruments and sample size, questions arise concerning the confidence with which results can be interpreted, questions which concern statistical power.

Power

Cook and Campbell (1979) state that three decisions must be made concerning the data. Is the study sensitive enough to measure covariation? If it is sensitive enough, is there reasonable evidence to make valid inferences on the relationship between independent and dependent variables? If there is such evidence, how strong is the relationship? Psychometric concerns have been addressed previously in the description of the reported validity and reliability of the social support instruments employed in this study. Beyond the properties of the instruments themselves, limitations related to the analysis of the data are reflected in the power of the results.

In this study a significance level of .05 was set a priori and a rationale for the selection of that level was articulated. In stating the results of the statistical tests employed in the analysis of the data, achieved significance levels were reported that met or exceeded the significance criterion; these can be found, for instance, in the text and tables related to chi-square statistics and analyses of variance. In doing so, a valid form of statistical inference can be made, insofar as a standard of proof is offered about the presence or absence of the phenomenon being examined

Cohen (1988) said that the basic problem with this kind of classical statistical inference is that it reduces inferential statements to a null hypothesis and its attendant significance criterion in defining what leads to rejection or failure to reject that null hypothesis. Even though the significance criterion allows a statement to be made about type I error (e.g., "the achieved result would occur less than five percent of the time if the null hypothesis is true"), it does not permit a statement to be made about the power of the test of the hypothesis. Cohen (1992) considers the significance criterion as only one of four related parameters that maximize statistical inference; the others include the sample

size, a measurement of power, and the effect size, none of these is independent of the others.

Cohen (1988, 1992) argues, with other considerations being equal, in favor of setting the value of power at .80; that is, assuming a beta level (β) of .20, the value of power ($1 - \beta = .80$) is a reasoned way to balance the competing requirements of the four parameters that contribute to meaningful statistical inference. In this study, this balance is reflected against the stated significance criterion of .05.

Central to a discussion of the meaning of rejecting a null hypothesis is a statement of the population effect size. In a discussion of effect size, descriptors such as "large effect", "medium effect", and "small effect" are used in the literature (Cohen, 1988, 1992), but only as approximations of exact values that can be calculated. As such, these terms serve more as didactic conventions lacking in uniform or exact meaning. In this study, medium effect sizes were determined for statistical tests, and their exact values were calculated using Cohen's (1988) formulas and tables.

For chi-square analyses, effect size indexes were calculated for all reported measures of independence. In this study, the chi-square analyses were of two types: those related to the central research questions and those related to subgroupings that provided descriptive information about the population itself. Those examining the entire sample from the population ($N = 95$) were related to the central research questions of possible relationships between the population and adjustment to residential care. Given a significance level (.05) and appropriate degrees of freedom, these chi-square analyses produced medium effect sizes (.30) and power reported between .81 to .83. The analyses of subgroupings of the population were limited by the sample size involved. This affected reported power, which ranged from .46 to .56. Since these analyses were included mostly for descriptive purposes and they were not directly related to the central research questions, the derived power values were considered noteworthy, if not significant. That

is, although not obtaining sufficient power to advance social support theory, they do offer information about the population being studied and suggest a direction for confirmatory research.

Power was calculated for the analyses of variance using Cohen's formulas and tables. Because unequal groups were included in each analysis, the sample size was calculated using a weighted mean of the means of each of the groups, representative of the relative proportion of its size in the total calculation. The attempt to determine power for these ANOVAs demonstrated a shortcoming of the achieved sample size in this study. With an established significance criterion of .05, and a desire to demonstrate power at least at .80, a medium effect size was not possible because of the limited sample size. In order to calculate a medium effect size for the four group ANOVA (with 3 degrees of freedom), a weighted $n = 52$ was necessary; for the six group ANOVA (with 5 degrees of freedom), a weighted $n = 39$ was necessary. The achieved weighted n for the four group ANOVA was $n = 23.75$, and for the six group ANOVA, it was $n = 15.83$. These were not adequate for a medium effect size but did fall within the parameters of a large effect size with power at .80 (Cohen, 1992).

Power analysis was also calculated for the k-group discriminant analyses utilizing Cohen's formulas and tables. For each of the discriminating variables, calculations were completed to determine the power of each ordered variable. A conventional operational definition of a medium effect size (.15) was utilized in the calculation (Cohen, 1988, p. 480). In the four group discriminant analysis, power ranged from a low of .88 for the first variable to a high of $\geq .98$ for the remaining variables. In the six group discriminant analysis, power ranged from a low of .81 to a high of $\geq .98$ for the four variables.

From these analyses, it can be concluded that the results were both significant (in terms of statistical outcomes) and with sufficient power to warrant confidence in their interpretation with respect to the null hypotheses tested.

Conclusions

Over the last twenty years, social support has been one of the most intensely researched areas in the social sciences. Most recently, the state of the field in social support research has moved beyond broad testing of theory in the general population to focus more and more on specific populations and contexts, in order to test both the robustness of effects related to social support and the limits of social support in the prevention and remediation of physical and psychological symptoms. It is within this context that the present study was designed. An effort was made to respond to the challenge of Vaux (1988) and others that researchers should focus more on particular subsets of the social network in order to assess specific types of support in particular circumstances.

In large part, the results of this study are consistent with prior findings of the nature and efficacy of social support in the lives of adolescents. It found, as earlier theorists had asserted, that support from family and friends are salient factors in the social world of adolescents, and that as adolescents mature, friends do not usurp the importance of support from family, but tend to supplement and amplify it. Results also support the reasoning of some critics of earlier research that social support is not a unitary phenomenon and that more nuanced operationalized definitions that measure specific supportive behaviors contribute more to understanding social support phenomena.

Results also support the assertion of several researchers that the measurement of subjective perceptions of support are related to adaptive outcomes, and may be more important than attempts at more "objective" measurement often found in the literature, such as having observers count the number of persons in an individual's social network or the number of interactions that are construed to be supportive. Not only were subjective appraisals found to be consistently related to outcomes in this study, but the ability to

assess a population derived from what objective observers might call a "deprived social environment" allowed for a test of the efficacy of subjective perceptions in tapping the social support domain. That is, it provided some evidence in response to the question of whether adjustment is related more to the number and types of actual supportive provisions or to the perception alone that support is available; subjective perceptions were found to be positively associated with adjustment.

In respect to theory, beyond being consistent with Cobb's and Vaux's articulation of the nature of social support, this study served three further purposes. First, it advances the understanding of the concept of weak ties in conceptualizing social support. It has long been a truism of the genre that strong social support is associated with adaptive outcomes and weak social support is not. What this study suggests is that "weak social ties" connotes not only shortcomings in what is provided (or perceived to be available), but also a weakness in the sources, that is, in who is doing the providing. The perception of weak support was associated with negative outcomes. Yet, in this study, even when social support was perceived to be adequate or strong, when it came from only one source (family or friends) but was not perceived to be adequate from the other source (friends or family), this lack of balanced support was also related to lack of adjustment at the six month outcome measurement. The only groups strongly associated with adjustment were those whose support was adequate from both family and friends.

Weak support, also, was not found to be synonymous with limited support. The study demonstrated, for this population at least, that social support does not have to encompass all types of supportive provisions (advice, emotional, financial, practical assistance, and socializing) to be associated with adjustment. For this population during this transition, some types of supportive behavior were more strongly associated with positive outcomes than were others. This suggests that because a social network is not able to provide all types of support does not necessarily mean that it fails to be supportive,

as long as that support is perceived to be important to the respondent or is relevant to the needs of the specific situation. For instance, in this study the perception of emotional, socializing, and financial support during adjustment to residential care was associated with actual outcomes, while advice and practical assistance were not.

The second implication for theory is the finding of a relationship between moderately strong social support and adjustment. Common wisdom in the field suggested that the stronger social support is, the better. This study found that, at least for this population and in this situation, very strong support may not be as important as "good enough" support. Perceptions of very strong support, in fact, may be indicative of morbid attachments and the subversive role of some support systems in undermining actions associated with a member becoming less dependent on that system. The sense of supportive ties being "good enough" also suggests, for the development of theory, that the limits of social support's efficacy may be due less to limitations inherent in a given supportive network and more indicative of healthy limits imposed by individuals on the network. Adaptive individuals may find their network to be supportive precisely because they do not have an over-reliance on it and because their perceptions of its ability to be supportive have realistic limits. Maladapted individuals may be more likely to perceive their network to be unsupportive when it actually is supportive, or may be less willing to turn to others for support; likewise, maladapted individuals may have an unhealthy reliance on others to provide them with what they find lacking in themselves or their milieu.

Third, this study permitted a snapshot to be developed of a special population's perceptions of its social resources during a specific moment of transition, to residential care. It supports those theorists who argue in favor of the importance of assessing specific types of supportive behaviors and persons in order to understand what social support provides in a given context. This study also raises questions about the possible commonalities between this population of adolescents and the general adolescent

population in their perceptions of social support during normal adolescent transitions. One of the expectations of this study was that it would help provide a descriptive baseline from which to compare perceived social support with related groups in transition.

Implications for Research and Practice

Consistent with other descriptive research, it is recognized that the implications associated with this study will derive more from their place in the larger social support literature and not from attempting to extend the implications of this single study beyond the population that was directly examined. This suggests several directions for future research while placing a caveat on immediate implications for the practice of psychology.

Future Research

From this study, several implications for future research emerge. First, further investigations of the population of adolescents in transition to residential care are needed in order to further assess the role of social support in adjustment to residential care and to evaluate the generalizability of this study's findings. This requires, as a first step, replication studies with other groups undergoing similar transitions. Specifically, these studies should be designed examine (a) whether the relative role of family and friends in providing support remains constant across other adolescent samples and conditions, and (b) whether the specific behaviors that were identified in this study as most strongly associated with adjustment are idiosyncratic to this sample, or consistent with the types of supportive provisions in other adolescent samples.

Second, the finding that emotional support is a salient factor in adolescent adjustment requires further examination. Specific questions that might be explored include: (a) is emotional support associated as strongly with adjustment for other samples similar to this study's, with other clinical adolescent samples, and with the general adolescent population; (b) is the perception of emotional support limited to the kind of

adjustment examined in this study; (c) is emotional support related to adjustment in other, dissimilar stressful situations; and (d) is there support for the hypothesis that emotional support is a generalized need of adolescent males? In terms of extending the current findings in this paper is the question of whether there are other supportive provisions not examined in this study which are more representative of the social needs of adolescents that have not yet been identified and measured?

Third, the idea of "good enough" support needs to be explored further. This includes not only studies assessing similar populations or replicated in similar situations, but in the general population, with diverse groups and under different circumstances. Specifically, four issues might be examined. First, is there evidence in other settings with adolescent groups of moderately strong social support being most strongly associated with desirable outcomes related to adjustment and the mitigation of stress. Second, is the finding of a difference between moderate and strong support in this study limited to this group or this particular situation or is it present in other settings and groups? This is a finding with potential significance for advancing social support theory. Related to this is the question of whether it is possible to quantify more precisely the differences between strong and moderate support; that is, to determine where the demarcation occurs between moderate ties (which are associated in this study with favorable outcomes) and strong ties (which are associated with negative ones). Third, is the perception of combined support from both family and friends (what was termed "balanced support" in this study) more important to adjustment than the presence of moderate ties?

A further consideration for research concerns the phenomenon of support from friends. Although Vaux's taxonomy is clearly represented in the SSB's operationalization of "support from friends", it may be desirable to examine this phenomenon in a more nuanced way insofar as "friends" may be too global a concept. In the social world of the adolescent, "friends" may consist of age-related others, of different-aged persons (for

instance, a coach at school or youth director at a community center) who might be considered to be a friend, but whose ability to provide support, and the types of support provided, might differ qualitatively and quantitatively from that of the peer group. Further specifying the similarities and differences between support from friends and support from other peers would help to clarify how they may act distinctly on the perception of supportive provisions available in the adolescent's entire salient social environment.

A final consideration for research involves a limitation of the current study. While this study examined the relationship between perceptions of support at the time of entry into residential care and adjustment at six months, it left open for future exploration the changes that occur in the social network over the course of adjustment, such as that which occurs with exposure to new schools, with other residents, and with the staff of the residential care institution. Future research might be directed at exploring the evolution of the social network in residential care. For instance, as the individual begins to relate more to other residents within the institution, is the relative importance of the pre-existing peer group diminished or enhanced; likewise, as other adults become a consistent part of the social environment of the resident, does the role of support from the family change ?

Implications for the Practice of Psychology

The counseling psychologist might apply the current findings in helping to construct a residential care milieu and in the practice of psychology with adolescent males in residence, with their families, and with implications for their peer relations.

Screening Applicants

Although dependent on replicated research, the results of the study suggest the potential role of social support evaluations in the process of screening and selecting candidates for residency. Residential care has become almost prohibitively expensive as a

treatment modality. The assessment of social support provisions identifiable prior to placement might help distinguish between candidates with the supportive resources associated with residential care adjustment and those who lack a social support system. If the results from the study are supported by other researchers, then screening might include a careful evaluation of candidates with weak social ties, or those dependent either on family or friends to the exclusion of the other, or those with an overdependence on supportive others as potentially weak candidates. Candidates with moderately strong support from both family and friends who are perceived as able to provide emotional, socializing, and financial support, might be the strongest candidates.

Advocacy

In terms of the residential milieu, the findings suggest several applications. First, it indicates an advocacy role for the psychologist. Because of obvious deficiencies in their lives that lead adolescents into residential care in the first place, and because the construction of a residential milieu involves the institution undertaking many of the activities normally performed by the adolescent's family or social group, it is possible for the residential milieu to become a kind of surrogate for the home and neighborhood, establishing itself as competing with family or friends. In some instances, it may be more cost effective for an institution to act as if it alone were a sufficient environment for adaptation to occur. Acting on the implications of this study, the psychologist can contribute to the construction of an adaptive environment by recognizing the inherent limitations of an institution and by acting to encourage normalized, frequent contact between family, friends, and residents. The findings from this study suggests to the psychologist that even non-traditional family structures, economically limited, and socially deprived families are capable of forming the basis for the adolescent's perception of being loved and cared for, and that this in turn will influence institutional adjustment. In one

sense, the role of advocacy can be seen as an application of the ethical principles of psychologists that require the psychologist to act in the best interests of the client. In establishing a supportive environment for residents, the milieu itself may be inadequate unless the family and other salient members of the support network are included.

Individual Therapy

As an individual therapist, the counseling psychologist might apply the findings of this study to focus in therapy on the perceptions adolescents have of the content and strength of support they received from others. Where there are problems either in perceiving others to be supportive or in the types of support they receive, the therapist might use this as an opportunity for therapy to structure a corrective experience. Exploring supportive provisions might have therapeutic utility for those adolescents (represented in a subset of subjects in the current study) who tend to view either family or friends in a non-nuanced way, either as totally supportive or totally lacking in support. Therapy might also provide a useful context in which to explore expectations and current perceptions of particular provisions of support, particularly emotional and concrete provisions. Finally, individual therapy can provide a suitable context in which to explore the strength of social ties with family or friends and the role that their reliance, overreliance, or underreliance on others plays in their adaptation.

Group Process

Residential care also provides the counseling psychologist with opportunities for working therapeutically through group process. The peer culture in the milieu provides an obvious alternative experience to an often-maladapted peer group that was left behind in the neighborhood. The psychologist can guide child care workers and others to use the group experience to structure and encourage opportunities for socially supportive exchanges among residents, and between residents and staff. The milieu also offers

opportunities for the psychologist to intervene directly, to help group members reflect on their experiences within the group in providing or depriving members of support. This study, particularly, offers an opportunity for the psychologist to help the group focus on those provisions identified as most relevant to adjustment to the institution, particularly emotional support. In addition to suggesting direct therapeutic interventions, this study offers the psychologist an opportunity to formulate and direct guided learning experiences, through modalities as diverse as modeling, role playing, psychodrama, and the establishment of token economies that encourage the practice of behaviors consistent with adaptive support among milieu group members.

Family Therapy

The counseling psychologist has a unique role among staff members of working directly with residents and their families in family therapy. Family therapy has the advantage of allowing work with the primary support group in real time to challenge maladaptive patterns of behavior and to guide the process of systemic change. The family system, as a homeostatic mechanism, will be largely resistant to change when dealt with from outside the system. By joining with the family in the therapeutic milieu, the counseling psychologist can deal with more than the symptoms of insufficient support. By addressing the issue of social support as a systemic issue, the therapist can affect change in the individual, but more importantly, in the entire family as the social group that will sustain and reinforce adaptive, supportive behavior.

Work with the family might also be accomplished by the counseling psychologist who acts in the role of family educator, by instructing parents lacking in social competence of appropriate roles, responsibilities, and means of sharing support that enhances adaptation of their adolescent member.

Parent Groups

The counseling psychologist might address the need to enhance social support provisions by establishing a therapy group for parents. In addition to the obvious benefits of a group process for addressing and resolving individual and couple issues, the group offers the opportunity for such interventions as modeling supportive behavior among participants, parents and guardians reflecting on experiences of support toward the institutionalized adolescents, and for teaching adaptive parenting techniques to the group.

Dealing with “Strong Ties” Families

Both the parent group process and family therapy also offer the counseling psychologist opportunities to help those families that fit the “strong ties” categorization. One explanation for strong ties being related to lack of adaptation to the institution is that these families may be emotionally overpowering and suffocating of efforts by individual family members to develop beyond the sphere of influence of the family. The process of the family letting go of its members to develop independent lives is critical to adaptation in life. Helping families, and particularly parents, to assist this process is an important therapeutic issue that the counseling psychologist can address.

Prevention

If these findings are replicated in other populations, it suggests a direction for prevention-related efforts. Informational and educational prevention efforts could, along with counseling and guidance, assist adolescents to develop the strength of supportive ties from family and friends by focusing on specific types of support that are relevant to transition and adjustment.

Conclusions

A conservative interpretation of results from this study is called for in any discussion of implications for professional practice. This study attempted solely to determine the existence of possible relationships between independent and dependent variables. It did not seek to establish causation between predictor and outcome variables; as such, it did not seek to use social support instruments as if they constituted a test. With this caveat understood, the implications of this study, and of the field of social support in intervention, remains great for psychologists.

Beyond the implications for the general practice of psychology and research discussed above, this study suggests one final role for the counseling psychologist, in providing support for families in the culture. In a period of heightened concern in American culture for providing support for adolescents during a time of life that often places them at risk, the findings from this study suggests a rationale and a direction for the role of families. Much is made in the culture of the diminishing influence of families on adolescents; there is some uncertainty on the part of many families as to their ability to influence, or the effects of that influence on, adolescent members. The results of this study reinforce the findings of other researchers who have pointed out that the supportive role of families does not necessarily diminish during adolescence, nor is it replaced by the peer culture. This information could provide support for families who are uncertain of their own importance for adolescent members. In addition, the findings from the study suggests several potential ways that families might be supportive of their adolescent members, particularly by providing emotional support, while encouraging a healthy independence that is not overly reliant on the family for its social provisions. This approach is consistent with what many healthy families already know about supporting adolescents; the finding is not novel, although the context may be. Taken together, the

results of the study suggests the ongoing importance of family ties, which even troubled adolescents themselves are capable of perceiving to be significant in their lives.

APPENDIX A
INFORMED CONSENT FORM

APPENDIX A

INFORMED CONSENT FORM

Support from Family and Friends Study.

The purpose of this study is to look at different kinds of support that your family and friends provide and the types of support you appreciate getting.

If you agree to participate in this study, you will be asked to complete three questionnaires. They will take several minutes to finish and can be completed in one sitting.

Before agreeing to participate, please note the following:

1. There are no right or wrong answers. What matters when you answer is how you think and feel about each question.
2. Your answers are kept confidential. That means that no one will see your answers except the researcher conducting the study.
3. Your answers will be anonymous. That means that the study will use Coded numbers instead of names to protect your privacy.
4. There is no risk involved. All you will be asked to do is to complete the questionnaires.
5. You can choose at any time not to participate. You can choose at any time to stop participating. Please be comfortable about this. If at any time you decide not to participate, just inform the person who gave you this sheet. There is no penalty for not participating in this study.
6. Your participation would be appreciated. Your answers, along with the answers of dozens of others, will help in understanding the role of support for teenagers by family and friends.

If you have any questions, the person who gave you this form will answer them.

STUDENT: I acknowledge that I have read and understand the statements above
and I freely agree to participate in this research study.
I understand that at any time I can freely withdraw from participation.

Student Signature Age Date

PARENT/

GUARDIAN: As the parent or guardian of _____ (student name)

I hereby consent to his participation in the research project being
conducted by Stephen Dohner, M.A.

I understand that no risk is involved, but that in any case I may
withdraw my child from participation at any time.

Parent/Guardian Signature Date

APPENDIX B

GENERAL BACKGROUND INFORMATION

APPENDIX B

GENERAL BACKGROUND INFORMATION

- I. Age: _____
- II. Grade: Freshman ____ Sophomore ____ Junior ____ Senior ____
- III. Racial Background: African-American (Black) ____ Hispanic ____
Caucasian (White) ____ Asian ____ Other _____
- IV. Family:
Number of Adults currently living at your home _____
Number of Children in your family _____
Are you the Oldest Child ____ Middle Child ____ Youngest Child ____
- V. Family Type: (check one)
Two Parents at home ____
Single Parent ____
Stepparent ____
I am not currently living at home _____

APPENDIX C

SOCIAL SUPPORT APPRAISALS SCALE (SSA)

APPENDIX C

SOCIAL SUPPORT APPRAISALS SCALE (SSA)

Instructions:

Below is a list of statements about your relationship with family and friends. Please indicate how much you agree or disagree with each statement as being true. Circle one number in each row.

1...Strongly Agree

2...Agree

3...Disagree

4...Strongly Disagree

1. My friends respect me.
2. My family cares for me very much.
3. I am not important to others.
4. My family holds me in high esteem.
5. I am well liked.
6. I can rely on my friends.
7. I am really admired by my family.
8. I am respected by other people.
9. I am loved dearly by my family.
10. My friends don't care about my welfare.
11. Members of my family rely on me.
12. I am held in high esteem.
13. I can't rely on my family for support.
14. People admire me.
15. I feel a strong bond with my friends.

16. My friends look out for me.
17. I feel valued by other people.
18. My family really respect me.
19. My friends and I are really important to each other.
20. I feel like I belong.
21. If I died tomorrow, very few people would miss me.
22. I don't feel close to members of my family.
23. My friends and I have done a lot for one another.

APPENDIX D

SOCIAL SUPPORT BEHAVIORS SCALE (SSB)

APPENDIX D

SOCIAL SUPPORT BEHAVIORS SCALE (SSB)

Family

Directions:

People help each other out in a lot of different ways. Suppose you had some kind of problem (were upset about something, needed help with a practical problem, were broke, or needed some advice or guidance), how likely would members of your family be to help you out of each of the specific ways listed below. We realize you may rarely need this kind of help, but if you did would your family help in the ways indicated? Try to base your answers on your past experience with these people. Use the scale below, and circle one number in each row.

- 1...No one would do this.
- 2...Someone might do this.
- 3...Some family member would probably do this.
- 4...Some family member would certainly do this.
- 5...Most family members would certainly do this.

- 1. Would suggest doing something, just to take my mind off my problems.
- 2. Would visit with me, or invite me over.
- 3. Would comfort me if I was upset.
- 4. Would give me a ride if I need one.
- 5. Would have lunch or dinner with me.
- 6. Would look after my belongings for awhile.
- 7. Would loan me a car if I needed one.
- 8. Would joke around or suggest doing something to cheer me up.
- 9. Would go to a movie or concert with me.

10. Would suggest how I could find out more about a situation.
11. Would help me out with a move or other big chore.
12. Would listen if I need to talk about my feelings.
13. Would have a good time with me.
14. Would pay for my lunch if I was broke.
15. Would suggest a way I might do something.
16. Would give me encouragement to do something different.
17. Would give me advice about what to do.
18. Would chat with me.
19. Would help me figure out what I wanted to do.
20. Would show me that they understand how I was feeling.
21. Would buy me a drink if I was short of money.
22. Would help me decide what to do.
23. Would give me a hug, or otherwise show me I was cared about.
24. Would call me just to see how I was doing.
25. Would help me figure out what was going on.
26. Would help me out with some necessary purchase.
27. Would not pass judgment on me.
28. Would tell me who to talk to for help.
29. Would loan me money for an indefinite period.
30. Would be sympathetic if I was upset.
31. Would stick by me in a crunch.
32. Would buy me clothes if I was short of money.
33. Would tell me about the available choices and options.
34. Would loan me tools, equipment, or appliances if I needed them.
35. Would give me reasons why I should or should not do something.

36. Would show affection for me.
37. Would show me how to do something I didn't know how to do.
38. Would bring me little presents of things I needed.
39. Would tell me the best way to get something done.
40. Would talk to other people, to arrange something for me.
41. Would loan me money and want to "forget about it".
42. Would tell me what to do.
43. Would offer me a place to stay for awhile.
44. Would help me think about a problem.
45. Would loan me a fairly large sum of money (say the equivalent of a month's rent or mortgage).

SOCIAL SUPPORT BEHAVIORS SCALE (SSB)

FriendsDirections:

People help each other out in a lot of different ways. Suppose you had some kind of problem (were upset about something, needed help with a practical problem, were broke, or needed some advice or guidance), how likely would members of your friends be to help you out of each of the specific ways listed below. We realize you may rarely need this kind of help, but if you did would your friends help in the ways indicated ? Try to base your answers on your past experience with these people. Use the scale below, and circle one number in each row.

- 1...No one would do this.
- 2...Someone might do this.
- 3...Some friend would probably do this.
- 4...Some friend would certainly do this.
- 5...Most friends would certainly do this.

- 1. Would suggest doing something, just to take my mind off my problems.
- 2. Would visit with me, or invite me over.
- 3. Would comfort me if I was upset.
- 4. Would give me a ride if I need one.
- 5. Would have lunch or dinner with me.
- 6. Would look after my belongings for awhile.
- 7. Would loan me a car if I needed one.
- 8. Would joke around or suggest doing something to cheer me up.
- 9. Would go to a movie or concert with me.
- 10. Would suggest how I could find out more about a situation.

11. Would help me out with a move or other big chore.
12. Would listen if I need to talk about my feelings.
13. Would have a good time with me.
14. Would pay for my lunch if I was broke.
15. Would suggest a way I might do something.
16. Would give me encouragement to do something different.
17. Would give me advice about what to do.
18. Would chat with me.
19. Would help me figure out what I wanted to do.
20. Would show me that they understand how I was feeling.
21. Would buy me a drink if I was short of money.
22. Would help me decide what to do.
23. Would give me a hug, or otherwise show me I was cared about.
24. Would call me just to see how I was doing.
25. Would help me figure out what was going on.
26. Would help me out with some necessary purchase.
27. Would not pass judgment on me.
28. Would tell me who to talk to for help.
29. Would loan me money for an indefinite period.
30. Would be sympathetic if I was upset.
31. Would stick by me in a crunch.
32. Would buy me clothes if I was short of money.
33. Would tell me about the available choices and options.
34. Would loan me tools, equipment, or appliances if I needed them.
35. Would give me reasons why I should or should not do something.
36. Would show affection for me.

37. Would show me how to do something I didn't know how to do.
38. Would bring me little presents of things I needed.
39. Would tell me the best way to get something done.
40. Would talk to other people, to arrange something for me.
41. Would loan me money and want to "forget about it".
42. Would tell me what to do.
43. Would offer me a place to stay for awhile.
44. Would help me think about a problem.
45. Would loan me a fairly large sum of money (say the equivalent of a month's rent or mortgage).

APPENDIX E
THREE MONTH EVALUATION FORM

APPENDIX E

THREE MONTH EVALUATION FORM

Student Number _____

I. During the last three months, the number of days this student was absent
was _____

II. During the last three months, the number of incidents of delinquency by this
student
was _____

III. Complete the AML Rating Form included with this form.

When finished, remove the cover sheet with identifying information (Student's Name) on
it.

The cover sheet should be destroyed.

Return this form and the AML Rating Form in the envelope provided.

APPENDIX F

AML BEHAVIOR RATING SCALE

APPENDIX F

AML BEHAVIOR RATING SCALE

Student Number _____

Directions:

For each of the observed behaviors listed below, check the appropriate rating. An explanation of the scoring scale is found in the interpretation key on the reverse side of this sheet.

1... Never

2...Seldom

3...Moderately Often

4...Often

5...Most or all of the time.

Observed Behavior:

1. Gets into fights or quarrels with other students.
2. Has to be coaxed or forced to work or play with other pupils.
3. Is restless.
4. Is unhappy or depressed.
5. Disrupts class discipline.
6. Becomes sick when faced with a difficult problem or situation.
7. Is obstinate.
8. Feels hurt when criticized.
9. Is impulsive.
10. Is moody.
11. Has difficulty learning.

AML Behavior Rating Scale Interpretation Key

<u>Point</u>	<u>Term</u>	<u>Point Designator</u>
1	Never	You have literally never observed this behavior in this child.
2	Seldom	You have observed this behavior once or twice in the last three months.
3	Moderately Often	You have observed this behavior more often than once a month but less than once a week.
4	Often	You have seen this behavior more often than once a week but less often than daily.
5	Most or all of the time	You have seen this behavior with great frequency, averaging once a day or more often.

APPENDIX G

TABLE 1

APPENDIX G

TABLE 1

Table 1.--Demographic Variables, Program, and Adjustment at 6 Months of all Residents in the Life Skills (LSP) and Transitional Living (TLP) Programs by Percentage

Variable	Total		Successful at 6 months	
	LSP (n = 55)	TLP (n = 41)	LSP (n = 20)	TLP (n = 20)
	%	%	%	%
Age				
14 years old	38.2	2.4	35.0	....
15 years old	45.5	22.0	40.0	20.0
16 years old	14.5	36.6	20.0	40.0
17 years old	1.8	26.8	5.0	25.0
18 years old .....	....	12.2	....	15.0
Racial heritage				
African American .	61.8	39.0	55.0	45.0
Caucasian	21.8	39.0	30.0	35.0
Hispanic	16.4	22.0	15.0	20.0
Birth Order				
Oldest	45.5	43.9	50.0	55.0
Middle	29.1	24.4	20.0	25.0
Youngest	9.1	17.1	10.0	20.0
Only child	16.4	14.6	20.0	....

Table 1.--Continued

Variable	Total		Successful at 6 Months	
	LSP	TLP	LSP	TLP
<u>Grade</u>				
Freshman	63.6	26.8	75.0	20.0
Sophomore	25.5	31.7	15.0	40.0
Junior	10.9	26.8	10.0	25.0
Senior .....	....	14.6	....	15.0
<u>Number of adults in the home</u>				
One adult	32.5	34.1	45.0	45.0
Two adults	45.5	61.0	40.0	55.0
Three or more	20.0	4.9	15.0	....
<u>Number of children</u>				
One child	16.4	14.6	20.0	....
Two children	34.5	24.4	40.0	25.0
Three or four	27.3	53.6	30.0	70.0
More than four	21.7	7.3	10.0	5.0
<u>Parents at home</u>				
Not living at home.	18.2	24.4	25.0	30.0
Single parent	43.6	39.0	50.0	50.0
Two parents	25.5	29.3	10.0	20.0
Other	12.7	7.3	15.0	....

APPENDIX H

TABLE 2

APPENDIX H

TABLE 2

Table 2.--Intercorrelations, Means, and Standard Deviations for Predictor and Outcome Variables

Variables			SSA			SSB Family				
	M	sd	Fam 1	Frd 2	Oth 3	Adv 4	Emo 5	Fnc 6	Pra 7	Soc 8
SSA										
1. Family	23.04	4.55	1.0000	....	....	....	....	....	....	....
2. Friend	21.27	4.48	-.0076	1.0000	....	....	....	....	....	....
3. Other	23.73	3.77	.3635	.5232	1.0000	....	....	....	....	....
SSB Family										
4. Advice	43.46	11.77	.4223	.0287	.0690	1.0000	....	....	....	....
5. Emotional	34.56	10.24	.5356	.0186	.1344	.8769	1.0000	....	....	....
6. Financial	26.83	8.68	.4706	.0396	.0840	.8164	.8154	1.0000	....	....
7. Practical	27.85	7.48	.5033	-.0283	.1428	.8470	.8303	.7719	1.0000	....
8. Socializing ...	25.20	7.09	.4716	-.0764	.0865	.8596	.8619	.7732	.8439	1.0000
SSB Friend										
9. Advice	42.02	9.57	-.0598	.2727	.1720	.3009	.3345	.2387	.2808	.2652
10. Emotional ..	35.50	8.68	.0340	.4366	.3142	.3182	.3229	.3192	.3085	.2993
11. Financial	24.30	7.04	.0841	.4004	.2738	.2498	.3346	.3120	.2701	.2115
12. Practical	27.08	6.58	.1196	.3763	.2717	.2550	.3678	.2591	.2897	.2327
13. Socializing .	26.96	6.11	.0738	.3244	.2707	.2935	.3670	.2611	.2687	.2938

Table 2.--Continued

Variable	SSB Friend					Outcome Measures				
	Adv 9	Emo 10	Fnc 11	Pra 12	Soc 13	Tru* 14	Tru** 15	Dnq* 16	Dnq* 17	AML* 18
SSA										
1. Family .....	....	....	....	....	....	....	....	....	....	....
2. Friend .....	....	....	....	....	....	....	....	....	....	....
3. Other .....	....	....	....	....	....	....	....	....	....	....
SSB Family										
4. Advice .....	....	....	....	....	....	....	....	....	....	....
5. Emotional ....	....	....	....	....	....	....	....	....	....	....
6. Financial .....	....	....	....	....	....	....	....	....	....	....
7. Practical .....	....	....	....	....	....	....	....	....	....	....
8. Socializing ...	....	....	....	....	....	....	....	....	....	....
SSB Friend										
9. Advice	1.0000	....	....	....	....	....	....	....	....	....
10. Emotional ..	.8082	1.0000	....	....	....	....	....	....	....	....
11. Financial ....	.7352	.7721	1.0000	....	....	....	....	....	....	....
12. Practical .....	.7811	.7680	.7859	1.0000	....	....	....	....	....	....
13. Socializing .	.6799	.8058	.6750	.7798	1.0000	....	....	....	....	....

Table 2.--Continued

Variable	M	sd	SSA			SSB Family				
			Fam 1	Frd 2	Oth 3	Adv 4	Emo 5	Fnc 6	Pra 7	Soc 8
<u>Outcome</u>										
14. Truancy*	3.33	5.66	.1449	-.0791	-.0060	.1552	.0519	.2658	.0639	.0667
15. Truancy**	1.65	3.48	.1688	-.2713	.0106	.0042	-.0531	.1417	.0211	.1006
16. Delinq.*	0.30	0.60	.2134	.0912	.0855	.0874	.2166	.1170	.1504	.2018
17. Delinq.**	0.15	0.36	-.1330	-.0361	-.0641	-.2750	-.2535	-.3590	-.2053	-.2395
18. AML*	33.54	5.12	.1320	-.2313	.0123	.2760	.2514	.2025	.2234	.2623
19. AML**	13.20	16.20	-.1672	-.1191	-.2887	.0039	-.0588	-.0046	-.0080	.0229

Note: * Measured at 3 months; ** measured at 6 months.

Table 2.--Continued

Variable	SSB Friend				
	Adv 9	Emo 10	Fnc 11	Pra 12	Soc 13
Outcome					
14. Truancy*	-.2580	-.1399	-.2776	-.2182	-.1800
15. Truancy**	-.2810	-.1295	-.1683	-.2349	-.2338
16. Delinq.*	.0893	.1065	.2056	.2462	.1820
17. Delinq.**	.1274	-.0174	-.1062	.0448	.0661
18. AML*	.3000	.3332	.3195	.1391	.2134
19. AML**	.1938	.1852	.1111	.1405	.1995

Table 2.--Continued

Variable	Outcome Measures					
	Tru* 14	Tru 15	**Dnq 16	*Dnq** 17	AML* 18	AML** 19
<u>Outcome</u>						
14. Truancy*	1.0000	....	....	....	....	....
15. Truancy**	.3697	1.0000	....	....	....	....
16. Delinq.*	-.0157	-.0421	1.0000	....	....	....
17. Delinq.**	-.2106	-.1816	.2425	1.0000	....	....
18. AML*	.3160	.4579	.2333	-.1165	1.0000	....
19. AML**	.1441	.1599	-.1530	.1469	.3151	1.0000

Note: * Measured at 3 months; ** measured at 6 months.

APPENDIX I

TABLE 3

APPENDIX I

TABLE 3

Table 3.--Measures of Independence (Chi-Square Statistic) for Social Support Appraisals (SSA) and Social Support Behaviors (SSB) Scores by Parent Structure of LSP Residents^a

Variable	Chi - Square Value	df	Significance	Minimum Expected Frequency	γ^b
<u>SS Appraisals</u>					
Support from Family ..	.83408	2	.65899	4.727	.17745
Support from Friends ..	7.97155	2	.01858*	4.364	.44747
Support from Others ...	9.07030	2	.01073	4.364	.62891
<u>SSB Family</u>					
Advice/Guidance .....	.41760	2	.81156	4.815	.14286
Emotional Support	1.53028	2	.46527	4.444	.11828
Financial Support .....	.40723	2	.81578	3.519	.02588
Practical Assistance ....	.54562	2	.76124	4.630	.16703
Socializing Support ....	.01705	2	.99151	4.815	.02386
<u>SSB Friends</u>					
Advice/Guidance	5.63069	2	.05988	4.074	.16279
Emotional Support	4.46377	2	.10733	5.000	.31687
Financial Support	7.33817	2	.02550*	4.630	.35200
Practical Assistance	7.51812	2	.02331**	4.259	.31174
Socializing Support	12.73528	2	.00172**	4.444	.63218

Note: * Denotes significant $\leq .05$; ** denotes significant $\leq .01$; ^a (n = 54);

^b Goodman-Kruskal Gamma statistic.

APPENDIX J

TABLE 4

APPENDIX J

TABLE 4

Table 4.--Measures of Independence (Chi Square Statistic) for Social Support from Friends (SSB) Scores by Number of Adults at Home for All Subjects, LSP Only, and All at Six Months

Variable	Chi Square Value	df	Significance	Minimum Expected Frequency	χ^2 ^a
<u>All Residents^b</u>					
Advice/Guidance	0.12179	1	.72710	14.211	.07692
Emotional Support	4.41729	1	.03558*	12.316	.43756
Financial Support	3.09403	1	.04817*	14.526	.41708
Practical Assistance ..	3.99643	1	.04560*	14.526	.42574
Socializing Support ...	3.26236	1	.07089	11.053	.38462
<u>LSP Residents^c</u>					
Advice/Guidance	0.30487	1	.58085	6.926	.16556
Emotional Support	4.20668	1	.04027*	8.500	.55752
Financial Support	2.84491	1	.09166	7.870	.47692
Practical Assistance .	6.31429	1	.01198*	7.241	.69184
Socializing Support ..	6.86804	1	.00878	7.556	.66667

Table 4.--Continued

Variable	Chi-Square Value	df	Significance	Minimum Expected Frequency	γ^a
<u>All at Six Months^d</u>					
Advice/Guidance	0.15625	1	.69263	6.400	.12903
Emotional Support	10.94017	1	.00094***	5.200	.84211
Financial Support	3.29966	1	.06929	7.200	.53846
Practical Assistance .	7.51918	1	.00610**	6.800	.73684
Socializing Support ..	5.07937	1	.02421	4.800	.66667

Note: * Significance $\leq .05$; ** $\leq .01$; *** $\leq .001$; TLP residents' SSB-Friends scores were $> .05$. ^a Goodman-Kruskal Gamma statistic; ^b($n = 95$); ^c($n = 54$); ^d($n = 40$).

APPENDIX K

TABLE 5

APPENDIX K

TABLE 5

Table 5.--Measures of Independence (Chi-Square Statistic) for Social Support Appraisals (SSA) and Social Support Behaviors (SSB) Scores by Number of Siblings for TLP Residents^a

Variable	Chi-Square Value	df	Significance	Minimum Expected Frequency	γ^b
<u>SS Appraisals</u>					
Support from Family ...	.16983	1	.68026	6.634	.13402
Support from Friends ..	.00946	1	.92251	5.854	.03226
Support from Others ...	4.80622	1	.02836*	7.415	.63636
<u>SSB Family</u>					
Advice/Guidance	2.75524	1	.09694	7.415	.49533
Emotional Support	1.62440	1	.20248	7.024	.39130
Financial Support .....	.43674	1	.50870	7.024	.21212
Practical Assistance ...	4.18810	1	.04071*	7.805	.59276
Socializing Support ...	.39614	1	.52909	7.024	.20000
<u>SSB Friends</u>					
Advice/Guidance .....	.40662	1	.52369	5.073	.21348
Emotional Support ....	.85888	1	.35405	4.683	.31034
Financial Support	2.36378	1	.12418	6.634	.46411
Practical Assistance .	.39614	1	.52909	7.024	.20000
Socializing Support .	.26122	1	.60928	4.293	.18012

Note: *Denotes significant $\leq .05$; ^a ($n = 41$); ^b Goodman-Kruskal Gamma statistic.

APPENDIX L

TABLE 6

APPENDIX L

TABLE 6

Table 6--Measures of Independence (Chi-Square Statistic) for Social Support (SSB) from Friends Scores by Racial Background of Residents Leaving Prior to Six Month Follow-up^a

Variable	Chi-Square Value	df	Significance	Minimum Expected Frequency
Advice/Guidance	5.18761	2	.07474	5.093
Emotional Support ...	3.45507	2	.17772	5.296
Financial Support.....	8.77271	2	.01245*	5.296
Practical Assistance ..	4.51155	2	.10479	4.481
Socializing Support ...	3.59044	2	.16609	4.685

Note: * Denotes significant $\leq .05$; ^a (n = 54).

APPENDIX M

TABLE 7

APPENDIX M

TABLE 7

Table 7--Measures of Independence (Chi-Square Statistic) for Social Support Appraisals (SSA) Scores by Grade for LSP and TLP Residents

Variable	Chi-Square Value	df	Significance	Minimum Expected Frequency	γ^a
<u>LSP Residents (n = 55)</u>					
Support from Family ....	.09379	1	.75942	9.455	.08571
Support from Friends ...	.16897	1	.68103	8.727	.11628
Support from Others	2.37615	1	.12320	8.727	.42373
<u>TLP Residents (n = 41)</u>					
Support from Family ...	1.17329	1	.27891	8.293	.33333
Support from Friends ...	2.25900	1	.13284	7.317	.46341
Support from Others ...	5.46690	1	.01938*	9.268	.64557

Note: * Denotes significant $\leq .05$; ^a Goodman-Kruskal Gamma statistic.

APPENDIX N

TABLE 8

APPENDIX N

TABLE 8

Table 8.--Measures of Independence (Chi-Square Statistic) for Social Support Appraisals (SSA) Scores by Outcome at Six Month Follow-up for all residents^a

Variable	Chi-Square Value	df	Significance	Minimum Expected Frequency	γ^b
Support from Family ...	2.65861	1	.10299	17.917	.33216
Support from Friends ..	1.37858	1	.24034	19.167	.23944
Support from Others ...	4.01173	1	.04518*	19.167	.39726

Note: ^a (n = 96) * Denotes significant $\leq .05$; ^b Goodman-Kruskal Gamma statistic.

APPENDIX O

TABLE 9

APPENDIX O

TABLE 9

Table 9.--Cluster Analysis of Social Support Appraisals and Behaviors Using a Four Cluster Solution in a K-Means Algorithm

Variable	Cluster 1 (n = 23)		Cluster 2 (n = 24)		Cluster 3 (n = 17)		Cluster 4 (n = 31)		F ratio
	M	sd	M	sd	M	sd	M	sd	
<u>SSA Scores</u>									
Family	60.60	7.59	44.88	8.43	52.23	8.87	44.88	6.39	23.165
Friends	55.81	6.33	50.88	8.71	40.85	9.32	50.62	9.86	9.741
Others	56.95	9.15	49.28	10.18	46.03	8.43	47.55	9.24	6.045*
<u>SSB Family</u>									
Advice	60.47	4.29	37.99	6.80	53.81	5.48	49.44	6.36	59.880
Emotional ..	61.81	4.06	37.94	6.09	51.81	6.85	49.58	4.74	77.772
Financial	60.72	3.68	38.44	6.59	51.55	6.17	50.15	7.31	50.948
Practical	60.77	4.85	39.01	7.71	52.16	6.20	49.33	6.42	45.964
Socializing .	60.15	4.44	37.78	6.82	54.61	6.33	49.40	5.57	62.354
<u>SSB Friends</u>									
Advice	56.20	6.11	44.27	9.45	40.51	8.88	55.03	6.52	22.351
Emotional ..	57.14	5.35	43.24	9.75	39.95	7.71	55.47	4.92	33.124
Financial	57.43	6.59	44.49	6.48	39.13	7.38	54.71	7.98	30.257
Practical	57.67	7.15	44.24	8.38	39.06	6.29	54.77	6.16	32.909
Socializing .	56.75	4.78	43.66	10.57	39.20	5.87	55.82	4.94	35.166

Note: * P = 0.001. All other variables report P ≤ 0.000

APPENDIX P

TABLE 10

APPENDIX P

TABLE 10

Table 10.--Cluster Analysis of Social Support Appraisals and Behaviors using a Six Cluster Solution in a K-Means Algorithm^a

Variable	<u>Cluster 1</u> (n = 15)		<u>Cluster 2</u> (n = 11)		<u>Cluster 3</u> (n = 12)		<u>Cluster 4</u> (n = 22)	
	M	sd	M	sd	M	sd	M	sd
<u>SSA</u>								
Family	60.16	8.24	42.52	7.93	52.29	5.17	42.72	7.73
Friends	58.03	4.99	57.72	4.59	38.60	8.41	47.57	9.89
Others	61.87	7.04	55.55	7.95	43.42	6.42	45.65	9.83
<u>SSB Family</u>								
Advice	60.94	4.40	35.62	5.81	55.20	4.48	49.07	6.02
Emotional ..	62.41	3.77	36.67	6.54	54.26	5.67	47.81	4.26
Financial	61.33	3.58	34.38	4.78	52.98	4.80	50.08	6.04
Practical	61.42	3.94	34.53	5.35	52.98	4.47	49.77	5.76
Socializing .	60.53	4.33	36.51	7.20	57.13	3.57	48.63	6.31
<u>SSB Friends</u>								
Advice	58.34	5.83	54.63	8.53	41.36	9.71	52.21	5.73
Emotional ..	59.18	5.20	55.29	7.40	38.97	6.99	52.88	4.96
Financial	60.38	4.52	52.04	9.85	39.40	8.03	51.20	8.16
Practical	59.19	5.56	55.12	7.73	39.11	5.52	51.05	6.11
Socializing .	57.59	5.13	55.27	4.19	39.17	6.70	52.67	6.84

Table 10.--Continued

Variable	<u>Cluster 5</u> (n = 18)		<u>Cluster 6</u> (n = 17)		<u>F ratio</u>
	<u>M</u>	<u>sd</u>	<u>M</u>	<u>sd</u>	
<u>SSA</u>					
Family	48.81	8.70	54.95	8.84	12.036
Friends	47.66	9.25	52.68	6.98	11.184
Others	48.51	9.82	47.75	5.78	10.460
<u>SSB Family</u>					
Advice	40.82	6.51	56.91	4.68	45.099
Emotional ..	40.83	6.34	57.21	4.79	51.553
Financial	41.36	5.83	57.04	5.55	49.177
Practical	42.10	7.15	56.49	5.99	40.617
Socializing .	41.02	6.92	55.86	5.77	36.113
<u>SSB Friends</u>					
Advice	39.24	8.89	54.28	5.28	17.644
Emotional ..	37.92	7.11	55.32	3.84	36.611
Financial	41.37	5.96	54.60	6.57	18.116
Practical	39.32	6.44	56.22	7.21	27.588
Socializing .	38.53	9.12	56.23	3.54	28.216

Note: ^a P value for all social support variables ≤ 0.000 .

APPENDIX Q

TABLE 11

APPENDIX Q

TABLE 11

Table 11.--Analysis of Variance for Four Cluster Groupings of Social Support Provision with a Dependent Variable of "Adjustment of Residents at Six Months"

Source	Sum of Squares	df	Mean Square	F	Probability
Mean	10740.00126	1	10740.00126	48.20	0.0000
Cluster group Membership ..	4825.76066	3	1608.58689	7.22	0.0002
Program (LSP/TLP) Membership ..	23.98816	1	23.98816	0.11	0.7436
Interaction of Cluster and Program Membership ..	494.47696	3	164.82565	0.74	0.5312
Error	19386.00160	87	222.82760		

APPENDIX R

TABLE 12

APPENDIX R

TABLE 12

Table 12.--Analysis of Variance for Six Cluster Groupings of Social Support Provision with "Adjustment of Residents at 6 Months" as the Dependent Variable

Source	Sum of Squares	df	Mean Square	F	Probability
Mean	9918.91716	1	9918.91716	41.90	0.0000
Cluster group Membership ..	3918.56684	5	783.71337	3.29	0.0093
Program (LSP/TLP) Membership ..	324.44448	1	324.44448	1.36	0.2466
Interaction of Cluster and Program Membership ..	969.91275	5	193.98255	0.81	0.5431
Error	19781.03578	83	238.32573		

APPENDIX S

TABLE 13

APPENDIX S

TABLE 13

Table 13.--Discriminant Function Coefficients using Groups derived from Four Clusters

Groups	Variables				
	SSA Family	SSA Friend	SSB Family Emotional	SSB Family Socializing	SSB Friend Emotional
	X ₁	X ₂	X ₃	X ₄	X ₅
Group One ...	1.20125	1.11322	1.98526	0.99447	1.23670
Group Two ...	0.92393	0.91591	1.26746	0.67590	0.88929
Group Three .	1.00345	0.89488	1.48319	1.04520	0.86628
Group Four ...	0.93581	0.93724	1.63491	0.82309	1.16923

APPENDIX T

TABLE 14

APPENDIX T

TABLE 14

Table 14.--Standardized Coefficients for Canonical Variables in a Four Group Discriminant Analysis^a

Variable	Group 1		Group 2		Group 3	
	Rank ^b	Score	Rank ^b	Score	Rank ^b	Score
SSA Family Support	3	0.36592	3	0.22044	1	0.68370
SSA Friends Support		0.30657		-0.14393	2	0.64942
SSB Emotional Support from Family	1	0.66573		-0.21588		-0.00090
SSB Socializing Support from Family		0.29298	2	0.59197	3	-0.34575
SSB Emotional Support from Friends	2	0.43665	1	-0.76184		-0.25600
Constant		-15.95077		1.73035		-3.37562

Note: ^a By pooled within-groups variance; ^b ranked by magnitude of coefficient.

APPENDIX U

TABLE 15

APPENDIX U

TABLE 15

Table 15.--Discriminant Function Coefficients using Groups derived from Six Clusters

Groups	Variables			
	SSA Others	SSB Family Emotional	SSB Family Financial	SSB Friends Emotional
	X_1	X_2	X_3	X_4
Group One	0.83950	1.68656	1.49626	1.43818
Group Two	0.75050	0.98812	0.76883	1.42244
Group Three ..	0.59262	1.48605	1.31376	0.90037
Group Four ...	0.60651	1.24147	1.25397	1.31851
Group Five	0.67048	1.08614	1.03169	0.90316
Group Six	0.63409	1.53471	1.40114	1.36085

APPENDIX V

TABLE 16

APPENDIX V

TABLE 16

Table 16.--Standardized Coefficients for Canonical Variables in a Six Group Discriminant Analysis^a

Variable	Group 1		Group 2		Group 3		Group 4	
	Rank ^b	Score	Rank ^b	Score	Rank ^b	Score ^b	Rank	Score
SSA Support from Others ..		0.09464	3	0.28727	1	0.92135	3	-0.25377
SSB Emotional Support from Family ...	1	0.57826		-0.22314	3	0.23323	2	0.83093
SSB Financial Support from Family ...	2	0.53253	2	-0.29740		-0.19067	1	-0.85100
SSB Emotional Support from Friends .	3	0.33164	1	0.87501	2	-0.36392		0.06512
Constant		-13.97696		-4.24497		-2.96235		1.04491

Note: By pooled within-groups variance; ^b ranked by magnitude of coefficient.

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DISSERTATION APPROVAL SHEET

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The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the committee with reference to content and form.

The dissertation is, therefore, accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

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Date

Gloria J. Lewis
Director's Signature